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Attenuators

Adding loss to a fiber optic system requires an optical attenuator. These devices perform system checks and reduce the optical power levels in order to minimize oversaturation, which can lead to system errors or degraded circuit quality. Optical attenuators are available in two basic styles: fixed and variable. Fixed attenuators are designed to reduce optical power levels at receivers. Variable attenuators are mostly used to perform system quality tests, but also can tune the received optical power level as required.

### LC Inline Fixed Attenuator—Single-mode

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A771-00-05</td>
<td>M/F, 5 dB, single-mode.</td>
</tr>
<tr>
<td>A771-00-10</td>
<td>M/F, 10 dB, single-mode.</td>
</tr>
<tr>
<td>A771-00-15</td>
<td>M/F, 15 dB, single-mode.</td>
</tr>
<tr>
<td>A771-00-20</td>
<td>M/F, 20 dB, single-mode.</td>
</tr>
</tbody>
</table>

### SC Inline Fixed Attenuator—Single-mode

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A771-08-05</td>
<td>M/F, 5 dB, single-mode.</td>
</tr>
<tr>
<td>A771-08-10</td>
<td>M/F, 10 dB, single-mode.</td>
</tr>
<tr>
<td>A771-08-15</td>
<td>M/F, 15 dB, single-mode.</td>
</tr>
<tr>
<td>A771-08-20</td>
<td>M/F, 20 dB, single-mode.</td>
</tr>
</tbody>
</table>

*Other options available

### FOVA Variable Attenuator

**Features**

The in-line design of the FOVA allows the technician to install the attenuator without disconnection of service. Available in 1310 nm and 1550 nm models, the FOVA is the perfect solution to almost any indoor or outdoor application.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-FOVA-1310</td>
<td>FOVA-1310 1310 nm Variable Attenuator.</td>
</tr>
<tr>
<td>A-FOVA-1550</td>
<td>FOVA-1550 1550 nm Variable Attenuator.</td>
</tr>
</tbody>
</table>
Simplex Cable

Simplex fiber optic cables provide the strength and flexibility required for today's fiber interconnect applications. Our simplex cable is tested to meet Telcordia GR-326 when used in connectorized assemblies. We provide customized performance with regard to jacket stiffness and flexibility, diameter, print legend, jacket color and tight buffer strippability. The easy strip option allows removal of up to one meter of 900 µm material without stripping the fiber’s 250 µm coating.

Features
- Tested to meet or exceed TIA-568-133 and Telcordia GR-409-CORE.
- Compliant to Directive 2002/95/EC (RoHS).
- LSZH meets the requirements of IEC 61034-1, 61034-2, 60332-1-1, 60332-1-2, 60754-1, 60754-2.

Applications
- Building interconnections (campus LAN).
- Trunking lines direct to telecommunications closet.
- Fiber patch panels within communications closets.
- Long haul networks.
- Links between electronic equipment and fiber patch panels.
- Connectorized patch cords for cross connect applications.

Mechanical Data

<table>
<thead>
<tr>
<th>Fiber Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Diameter</td>
</tr>
<tr>
<td>Weight</td>
</tr>
<tr>
<td>Tension</td>
</tr>
<tr>
<td>Bending Radius</td>
</tr>
<tr>
<td>Temperature Range</td>
</tr>
<tr>
<td>Riser</td>
</tr>
<tr>
<td>Plenum</td>
</tr>
<tr>
<td>lbs/1000 ft (kg/km)</td>
</tr>
<tr>
<td>lbs/1000 ft (kg/km)</td>
</tr>
<tr>
<td>lbs (N)</td>
</tr>
<tr>
<td>inches (cm)</td>
</tr>
<tr>
<td>Installation</td>
</tr>
<tr>
<td>Long Term</td>
</tr>
<tr>
<td>Installation</td>
</tr>
<tr>
<td>Long Term</td>
</tr>
<tr>
<td>Operating/Installation</td>
</tr>
<tr>
<td>Storage</td>
</tr>
</tbody>
</table>

Plenum
- 1 0.11 (2.9) — 6 (9) 22 (100) 7 (30) 2.0 (5.0) 1.2 (3.0) 0°C to +70°C —40°C to +75°C
- 1 0.09 (2.4) — 5 (7) 22 (100) 7 (30) 2.0 (5.0) 1.2 (3.0)
- 1 0.08 (2.0) — 3 (5) 22 (100) 7 (30) 2.0 (5.0) 1.2 (3.0)
- 1 0.06 (1.6) — 2 (3) 22 (100) 7 (30) 2.0 (5.0) 1.2 (3.0)

Riser
- 1 0.11 (2.9) 5 (7) — 22 (100) 7 (30) 2.0 (5.0) 1.2 (3.0) —20°C to +70°C —40°C to +75°C
- 1 0.09 (2.4) 3 (5) — 22 (100) 7 (30) 2.0 (5.0) 1.2 (3.0)
- 1 0.08 (2.0) 3 (4) — 22 (100) 7 (30) 2.0 (5.0) 1.2 (3.0)
- 1 0.06 (1.6) 2 (2) — 22 (100) 7 (30) 2.0 (5.0) 1.2 (3.0)

LSZH
- 1 0.11 (2.9) 5 (7) — 22 (100) 7 (30) 2.0 (5.0) 1.2 (3.0)
- 1 0.09 (2.4) 3 (5) — 22 (100) 7 (30) 2.0 (5.0) 1.2 (3.0)
- 1 0.08 (2.0) 3 (4) — 22 (100) 7 (30) 2.0 (5.0) 1.2 (3.0)

Part # Description
Contact Light Brigade for part number, configuration, description, and spec sheet.
Zipcord, Dual-link and Micro-dual Cordage

Zipcord, Dual-link and Micro-dual cables provide links to the future for such protocols as FDDI, 10 Gigabit Ethernet, ATM, and Fibre Channel. Connections are easy to terminate with this flexible, two-fiber design. LSZH jacketed cables are OFNR listed. One design for global companies that don’t want to maintain multiple cable types for varying global standards.

Features
- Print legend customization.
- 12 jacket standard colors available.
- Easy strip option allows removal of up to 1 meter of 900 µm material without stripping the fiber’s 250 µm coating.
- Ruggedized duplex designs for transport from communications closet to wall outlet.
- Tested to meet or exceed TIA-568-133 and Telcordia GR-409-CORE.
- LSZH meets the requirements of IEC 61034-1, 61034-2, 60332-1-1, 60332-1-2, 60754-1, 60754-2.
- Compliant to Directive 2002/95/EC (RoHS).

Applications
- Communications closet to wall outlet.
- Wall outlet to desk.
- Connectorized patch cords for interconnect and cross-connect applications.
- Easy interface to ESCON®, FDDI, and various other duplex connectors.

Mechanical Data

<table>
<thead>
<tr>
<th>Cable Type</th>
<th>Fiber Count</th>
<th>Nominal Diameter inches (mm)</th>
<th>Weight lbs/1000 ft (kg/km)</th>
<th>Tension lbs (N)</th>
<th>Bending Radius inches (cm)</th>
<th>Temperature Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zipcord</td>
<td>2</td>
<td>0.11 x 0.22 (2.9 x 6.0)</td>
<td>10 (15)</td>
<td>22 (100)</td>
<td>7 (30)</td>
<td>PLENUM: 0°C to +70°C</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0.09 x 0.19 (2.4 x 4.8)</td>
<td>7 (10)</td>
<td>22 (100)</td>
<td>7 (30)</td>
<td>RISER: −20°C to +70°C</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0.08 x 0.16 (2.0 x 4.0)</td>
<td>5 (8)</td>
<td>22 (100)</td>
<td>7 (30)</td>
<td>−40°C to +75°C</td>
</tr>
<tr>
<td>Micro-dual</td>
<td>2</td>
<td>0.06 x 0.12 (1.6 x 3.2)</td>
<td>4 (6)</td>
<td>22 (100)</td>
<td>7 (30)</td>
<td>−40°C to +75°C</td>
</tr>
<tr>
<td>DUAL-link</td>
<td>2</td>
<td>0.08 (2.0)</td>
<td>3 (5)</td>
<td>22 (100)</td>
<td>7 (30)</td>
<td>−40°C to +75°C</td>
</tr>
<tr>
<td>Ruggedized</td>
<td>2</td>
<td>0.185 x 0.30 (4.7 x 7.6)</td>
<td>34 (50)</td>
<td>22 (100)</td>
<td>7 (30)</td>
<td>−40°C to +75°C</td>
</tr>
</tbody>
</table>

Part # Description
Contact Light Brigade for part number, configuration, description, and spec sheet.
Distribution Cable – Tight Buffered Cable

Distribution cable – tight buffered cable designs allow for excellent packaging density, flexibility, and ease of routing. Buffered to 900 µm, these cables can be directly terminated into connectors in loaded panels or in communications closets.

Features

- Tested to meet or exceed TIA-568-A/GR-409-CORE.
- Compliant to Directive 2002/95/EC (RoHS).
- Mixed fiber designs available.

Cable Components

Applications

- Connectorized communications cables with both send-and-receive and send-and-receive backup in a single unit.
- Routing between communications closets and equipment rooms.
- Intrabuilding backbones.
- OFNR and OFNP ratings.

Mechanical Data

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Nominal Diameter</th>
<th>Weight Riser</th>
<th>Weight Plenum</th>
<th>Tension Installation</th>
<th>Tension Long Term</th>
<th>Bending Radius Long Term</th>
<th>Temperature Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>inches (mm)</td>
<td>lbs/1000 ft (kg/km)</td>
<td>lbs/1000 ft (kg/km)</td>
<td>Installation</td>
<td>Long Term Installation</td>
<td>Long Term Operating/Installation</td>
<td>Storage</td>
</tr>
<tr>
<td>QUAD-Link</td>
<td>4</td>
<td>0.19 (4.8)</td>
<td>17 (25)</td>
<td>20 (30)</td>
<td>100 (440)</td>
<td>30 (132)</td>
<td>3.0 (7.2)</td>
</tr>
<tr>
<td>CPC</td>
<td>6</td>
<td>0.17 (4.4)</td>
<td>12 (17)</td>
<td>13 (20)</td>
<td>100 (440)</td>
<td>30 (132)</td>
<td>3.0 (7.2)</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0.19 (4.8)</td>
<td>13 (19)</td>
<td>17 (25)</td>
<td>100 (440)</td>
<td>30 (132)</td>
<td>3.0 (7.2)</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>0.22 (5.5)</td>
<td>17 (25)</td>
<td>20 (30)</td>
<td>100 (440)</td>
<td>30 (132)</td>
<td>3.5 (8.3)</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>0.32 (8.0)</td>
<td>34 (50)</td>
<td>38 (56)</td>
<td>100 (440)</td>
<td>30 (132)</td>
<td>5.0 (12.0)</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>0.34 (8.5)</td>
<td>41 (61)</td>
<td>46 (69)</td>
<td>150 (660)</td>
<td>45 (198)</td>
<td>5.5 (12.9)</td>
</tr>
</tbody>
</table>

Part # | Description

Contact Light Brigade for part number, configuration, description, and spec sheet.
Sub-unit Distribution MicroCore® Cable

Sub-unit Distribution MicroCore Cables are ideal for 12-144 fiber high performance premises installations where space is a premium. The round cross-sectional building blocks combine to provide a tight package, while enabling high density architecture. Each 12-fiber sub-unit consists of 250 μm colored fibers and aramid strength members enclosed by a high performance jacket. The sub-units are designed to be independently routed in FMS systems.

Features

- Plenum NFPA 262 rated Riser UL 1666 rated.
- LSZH performance verified to IEC 60754-2, 61034-2 and 60332-3-24.
- Tested to meet or exceed TIA-568-B3, Telcordia GR-409-CORE and ANSI/ICEA S-83-596.
- Flexible dielectric FRP central strength member in four position, 24 fiber designs and higher.
- High performance fluoropolymer, PVC or LSZH outer jackets available.
- No preferential bend typically found in stacked ribbon designs.
- Small diameter/superior bend performance.
- All aramid tensile strength members within sub-units.
- Sub-units are suitable for direct termination with round boot MTP.
- Compliant to Directive 2002/95/EC (RoHS).

Applications

- In-building cable runs where space is a premium.
- Trunk applications where flexibility and small required bend radius are needed to route cable.
- High density cable areas like Data Centers and Central Offices.
- Trunk cables where MTP can be directly terminated on subunits.

Cable Components

- 12-fiber sub-unit, P.L
- Ruggedized 12-fiber, P.O.L
- 36 and 48 fiber, P.O.L
- 2460 fiber, I
- 96 fiber, P.R.L
- 1449 fiber, P.L
- 144 fiber, F

Key: P, Q=Plenum, R=Riser, L=LSZH

Mechanical Data

There are many options available, each with different specifications. Contact Light Brigade for specifics before ordering.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contact Light Brigade for part number, configuration, description, and spec sheet.</td>
</tr>
</tbody>
</table>

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Indoor/Outdoor Tight Buffered Riser Cable

Indoor/outdoor tight buffered cables are specified for campus network cabling between buildings where interbuilding lengths are short enough that the installer can recognize savings from the lower costs of terminating tight buffered cables.

For indoor applications the cable is OFNR listed. For outdoor applications the cable has an outer jacket that incorporates a UV stabilizer for protection against exposure to the sun plus an anti-fungus protection for underground applications.

**Features**

- Cables are water blocked and meet water penetration requirements of GR-20-CORE to help ensure that any damage to cable is restricted to a repairable length of several meters.
- Outer jacket is moisture, fungus, and UV resistant for outdoor use.
- With a riser rating, this cable can be used in all environments: riser, general inside plant, and outside plant.
- Tested to meet or exceed TIA-568-A, GR-409-CORE, and ICEA-S-104-696.
- MSHA approved for mining applications.
- Compliant to Directive 2002/95/EC (RoHS).

**Temperature Range**

- Operating: –40°C to +75°C
- Storage: –20°C to +75°C
- Installation: –40°C to +75°C

**Mechanical Data**

<table>
<thead>
<tr>
<th>Cable Type</th>
<th>Fiber Count</th>
<th>Nominal Diameter</th>
<th>Weight</th>
<th>Tension</th>
<th>Bending Radius</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor/Outdoor Tight Buffered Cable</td>
<td>2</td>
<td>0.19 (4.8)</td>
<td>14 (21)</td>
<td>150 (660)</td>
<td>2.8 (7.2)</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0.19 (4.8)</td>
<td>15 (23)</td>
<td>150 (660)</td>
<td>2.8 (7.2)</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>0.21 (5.3)</td>
<td>19 (28)</td>
<td>150 (660)</td>
<td>3.1 (8.0)</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0.22 (5.6)</td>
<td>23 (33)</td>
<td>150 (660)</td>
<td>3.3 (8.4)</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>0.26 (6.5)</td>
<td>26 (38)</td>
<td>150 (660)</td>
<td>3.5 (9.0)</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>0.31 (8.0)</td>
<td>40 (59)</td>
<td>300 (1320)</td>
<td>4.7 (12.0)</td>
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<tr>
<td></td>
<td>24</td>
<td>0.33 (8.7)</td>
<td>46 (69)</td>
<td>300 (1320)</td>
<td>5.2 (13.1)</td>
</tr>
</tbody>
</table>

**Cable Components**

- 900μm tight buffered fiber
- aramid yarn
- outer jacket
- ripcord

**Part # Description**

Contact Light Brigade for part number, configuration, description, and spec sheet.
Indoor/Outdoor Sub-unit Distribution
Tight Buffered Riser Cable

Waterblocked 12-fiber sub-units are helically stranded to provide sub-unitized cables ranging from 24 to 72 fiber counts. These cables are OFNR listed for indoor applications. Both the sub-unit jackets and outer sheath contain a UV stabilizer and anti-fungus protection for use in outdoor applications. Sub-units contain a water-swellable aramid and 12 tight buffered fibers.

Features
- Sub-units are water-blocked and meet water penetration requirements of GR-20-CORE (this helps ensure that any damage to cable is restricted to a repairable length of several meters).
- Outer jacket is moisture-resistant, fungus-resistant and UV resistant for outdoor use. With a Riser rating, this cable can be used in all environments: Riser, general inside plant and outside plant.
- Sub-units tested to meet or exceed TIA-568-A / GR-409-CORE and ICEA-S-104-696.
- Compliant to Directive 2002/95/EC (RoHS)
- MSHA approved for mining applications.

Cable Components

Mechanical Data

<table>
<thead>
<tr>
<th>Cable Type</th>
<th>Fiber Count</th>
<th>Nominal Diameter</th>
<th>Weight Lbs/1,000 ft (kg/km)</th>
<th>Tension lbs. (N)</th>
<th>Bending Radius Inches (cm)</th>
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</thead>
<tbody>
<tr>
<td>Indoor/Outdoor Tight Buffered Cable</td>
<td>24</td>
<td>0.67 (16.9)</td>
<td>169 (252)</td>
<td>300 (1320)</td>
<td>90 (396)</td>
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<tr>
<td></td>
<td>36</td>
<td>0.67 (16.9)</td>
<td>178 (265)</td>
<td>300 (1320)</td>
<td>90 (396)</td>
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<tr>
<td></td>
<td>48</td>
<td>0.67 (16.9)</td>
<td>187 (278)</td>
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<td>90 (396)</td>
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<td>90 (396)</td>
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<td>0.81 (20.7)</td>
<td>233 (346)</td>
<td>300 (1320)</td>
<td>90 (396)</td>
</tr>
</tbody>
</table>

Part #  Description

Contact Light Brigade for part number, configuration, description, and spec sheet.
Single-Jacket Indoor/Outdoor Loose Tube Cable Riser Rated (OFNR)

Indoor/outdoor stranded loose tube combines the robust mechanical and environmental characteristics of an outside plant cable with the flexibility of an inside plant riser cable. Routing directly from the outside plant to telecommunications closets or main distribution frames through the riser of a building eliminates costly splice locations and 50-foot rule requirements when entering into a building. Indoor/outdoor stranded design loose tube cable is moisture and UV resistant 5-Z stranded for easy mid-span access, listed for OFNR use per UL standards, and can be used in both duct and lashed applications. It is also MSHA approved for mining applications.

Applications
- Building interconnections (campus LAN).
- Trunking lines direct to telecommunications closet.
- Local loop.
- Distance learning.
- Distribution.
- Intrabuilding backbones.

Temperature Range
Operating: –40°C to +70°C
Storage: –40°C to +75°C
Installation: –30°C to +70°C

Mechanical Data

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Number of Tubes/Fibers</th>
<th>Nominal Diameter</th>
<th>Nominal Weight lbs/1,000 ft (kg/km)</th>
<th>Maximum Tensile Load lbs. (N)</th>
<th>Minimum Bend Radius inches (cm)</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td>Short Term</td>
<td>Long Term</td>
<td>Short Term</td>
</tr>
<tr>
<td>6</td>
<td>1w/6 (4 fillers)</td>
<td>0.51 (12.9)</td>
<td>107 (159)</td>
<td>600 (2700)</td>
<td>200 (890)</td>
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<tr>
<td>12</td>
<td>1w/12 (4 fillers)</td>
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<td>108 (160)</td>
<td>600 (2700)</td>
<td>200 (890)</td>
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<tr>
<td>18</td>
<td>1w/12, 1w/6 (3 fillers)</td>
<td>0.51 (12.9)</td>
<td>108 (161)</td>
<td>600 (2700)</td>
<td>200 (890)</td>
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<tr>
<td>24</td>
<td>2w/12 (3 fillers)</td>
<td>0.51 (12.9)</td>
<td>108 (161)</td>
<td>600 (2700)</td>
<td>200 (890)</td>
</tr>
<tr>
<td>30</td>
<td>2w/12, 1w/6 (2 fillers)</td>
<td>0.51 (12.9)</td>
<td>109 (162)</td>
<td>600 (2700)</td>
<td>200 (890)</td>
</tr>
<tr>
<td>36</td>
<td>3w/12 (2 fillers)</td>
<td>0.51 (12.9)</td>
<td>109 (162)</td>
<td>600 (2700)</td>
<td>200 (890)</td>
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<td>110 (164)</td>
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<td>200 (890)</td>
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<tr>
<td>60</td>
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<td>158 (236)</td>
<td>600 (2700)</td>
<td>200 (890)</td>
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<tr>
<td>96</td>
<td>8w/12 (No fillers)</td>
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<td>159 (237)</td>
<td>600 (2700)</td>
<td>200 (890)</td>
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<tr>
<td>108</td>
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<td>197 (294)</td>
<td>600 (2700)</td>
<td>200 (890)</td>
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<tr>
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<td>11w/12 (1 filler)</td>
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<td>242 (360)</td>
<td>600 (2700)</td>
<td>200 (890)</td>
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<tr>
<td>144</td>
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<td>243 (361)</td>
<td>600 (2700)</td>
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Typical Maximum Lengths*

<table>
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<th>Single-mode Feet</th>
<th>Single-mode Meters</th>
<th>Multimode Feet</th>
<th>Multimode Meters</th>
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<tr>
<td>6-144</td>
<td>22,900</td>
<td>7,000</td>
<td>22,900</td>
<td>7,000</td>
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</table>

* Longer lengths may be available.

Cable Components

- PVC jacket
- Strength elements
- Binder
- Water blocking system
- FRP central member
- Optical fiber
- Rip cord
- Gel-filled loose buffer tube

Part # | Description
--- | ---
Contact Light Brigade for part number, configuration, description, and spec sheet.
RIBBON-Link® Cable

RIBBON-Link cables combine high fiber density in a small diameter, flexible package. These cables can be terminated with 12 or 24 fiber multifiber connectors or the fibers can be fanned out and terminated individually. Plenum, Riser and LSZH options are all UL listed.

Features
- Fiber counts up to 48 with unitized, zip configuration construction.
- Maximum of two 12-fiber ribbons per unit.
- Skew matched ribbons available (<10, <6, <5, <4, <3, <2, <1.2 ps/meter).
- Easy interface to MT and MTP based connectors as well as today’s newest ribbon connectors (12- or 24-fiber ferrules).
- Ruggedized versions with additional jacketing are available.
- Tested to meet or exceed TIA-568-A / GR-409-CORE.
- Compliant to Directive 2002/95/EC (RoHS).

Applications
- Direct interface to computers with the use of backplane style fiber connectors.
- High density interconnection to wall outlets or patch panels with ribbon connector interfaces.
- Micro-diameter fanout cables utilizing standard industry fiber connectors (ST, SC, FC, LC, MT-RJ).
- VSR OC-192/OC-768 interface based on parallel fiber optics.

Mechanical Data

<table>
<thead>
<tr>
<th>Cable Type</th>
<th>Fiber Count</th>
<th>Nominal Diameter</th>
<th>Weight</th>
<th>Tension</th>
<th>Bending Radius</th>
<th>Temperature Range</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>inches (mm)</td>
<td>lbs/1000 ft (kg/km)</td>
<td>Installation</td>
<td>Long Term</td>
<td>Installation</td>
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<tr>
<td>RIBBON-Link (Single-pod)</td>
<td>4</td>
<td>0.08 x 0.16 (2.1 x 4.0)</td>
<td>7.5 (11)</td>
<td>22 (100)</td>
<td>7 (30)</td>
<td>2.4 (6.0)</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>0.08 x 0.16 (2.1 x 4.0)</td>
<td>7.5 (11)</td>
<td>22 (100)</td>
<td>7 (30)</td>
<td>2.4 (6.0)</td>
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<tr>
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<td>8</td>
<td>0.08 x 0.16 (2.1 x 4.0)</td>
<td>7.5 (11)</td>
<td>22 (100)</td>
<td>7 (30)</td>
<td>2.4 (6.0)</td>
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<tr>
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<td>0.08 x 0.18 (2.1 x 4.6)</td>
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<td>22 (100)</td>
<td>7 (30)</td>
<td>2.7 (6.9)</td>
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<tr>
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<td>24</td>
<td>0.10 x 0.18 (2.5 x 4.6)</td>
<td>8.7 (13)</td>
<td>22 (100)</td>
<td>7 (30)</td>
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<td>22 (100)</td>
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<td>22 (100)</td>
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<td>22 (100)</td>
<td>7 (30)</td>
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<td>Round Ribbon (Simplex)</td>
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<td>5 (7)</td>
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<td>7 (30)</td>
<td>2.0 (5.0)</td>
</tr>
</tbody>
</table>

Part # | Description
--- | ---
Contact Light Brigade for part number, configuration, description, and spec sheet.
Acting as the backbone for most of today's fiber based systems, stranded fiber optic cables play a critical role in the high speed network. These dielectric OSP loose tube fiber optic cables are designed to provide high fiber counts with the flexibility and versatility required for today's most demanding installations. With fiber counts up to 576 and S-Z strand designs for easy mid-span access, these cables comply with TIA, REA/RUS PE-90 and GR-20. Industry standard designs combined with innovative technologies, such as a dry core product, yield a world class cable that will support today's and tomorrow's technological needs.

### Applications
- Long haul networking.
- Building interconnections (campus LAN).
- Trunking lines direct to telecommunications closet.
- Local loop.
- Distance learning.
- Distribution.
- Intrabuilding backbones.

### Temperature Range
- Operating: –40°C to +70°C
- Storage: –40°C to +75°C
- Installation: –30°C to +70°C

### Mechanical Data

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Number of Tubes/Fibers</th>
<th>Nominal Diameter</th>
<th>Nominal Weight</th>
<th>Maximum Tensile Load</th>
<th>Minimum Bend Radius</th>
<th>Short Term</th>
<th>Long Term</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>inches/mm</td>
<td>lbs/1,000ft/kg</td>
<td>Short Term (N)</td>
<td>Long Term (N)</td>
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<td>inches/cm</td>
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<td>4.1 (11)</td>
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<td>600 (2670)</td>
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<td>8.2 (21)</td>
<td>4.1 (11)</td>
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<td>8.2 (21)</td>
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<td>57/85</td>
<td>600 (2670)</td>
<td>200 (890)</td>
<td>8.2 (21)</td>
<td>4.1 (11)</td>
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<td>600 (2670)</td>
<td>200 (890)</td>
<td>8.2 (21)</td>
<td>4.1 (11)</td>
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<td>36</td>
<td>3w/12 (2 fillers)</td>
<td>0.41/10.5</td>
<td>58/86</td>
<td>600 (2670)</td>
<td>200 (890)</td>
<td>8.2 (21)</td>
<td>4.1 (11)</td>
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<td>6.7 (17)</td>
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</table>
Single-Jacket Single-Armor OSP Stranded Loose Tube

Used as the backbone for most of today’s fiber based systems, stranded fiber optic cables play a critical role in the high speed network. These armored loose tube single jacket/single armor fiber optic cables are designed to provide high fiber counts with the flexibility and versatility required for today’s most demanding installations, including direct buried. With fiber counts up to 144 and S-Z strand designs for easy mid-span access, these cables comply with TIA, REA/RUS PE-90 and GR-20. Industry standard designs combined with innovative technologies, such as a dry core product, yield a world class cable that will support today’s and tomorrow’s technological needs.

Applications
- Long haul networking.
- Building interconnections (campus LAN).
- Trunking lines direct to telecommunications closet.
- Local loop.
- Distance learning.
- Distribution.
- Intrabuilding backbones.

Temperature Range
- Operating: –40°C to +70°C
- Storage: –40°C to +75°C
- Installation: –30°C to +70°C

Typical Maximum Lengths*

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Single-mode</th>
<th>Multimode</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Feet</td>
<td>Meters</td>
</tr>
<tr>
<td>6-144</td>
<td>19,686</td>
<td>6,000</td>
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* Longer lengths may be available upon request.

Mechanical Data

There are many options available, each with different specifications. Contact Light Brigade for specifics before ordering.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Light Brigade for part number, configuration, description, and spec sheet.</td>
<td></td>
</tr>
</tbody>
</table>
Armored Tight Buffered Central Tube Premise Cable

Armored tight buffered CPC assemblies incorporate 4 to 144 fibers into a jacketed, aluminum interlocking armor that provides the best balance of ruggedness, flexibility, and low weight. Flame rated armored cables with no outer jacket and flame rated armored cables with steel interlocking armor are also available. Interlocking armor can also be used with other types of trunk cables, including indoor/outdoor distribution, breakout, and premise MicroCore®.

Cable Components

Applications
- Routing inside of buildings where additional ruggedness is required or where increased rodent resistance is required.
- Extra protection for fiber optic cables in harsh industrial environments.
- Manufacturing plants.
- High-density routings in data center applications.

Mechanical Data

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Nominal Diameter (inches (mm))</th>
<th>Weight</th>
<th>Riser (lbs/1000 FT (kg/km))</th>
<th>Plenum (lbs/1000 FT (kg/km))</th>
<th>Installation Riser lbs (N)</th>
<th>Long Term lbs (N)</th>
<th>Installation Plenum lbs (N)</th>
<th>Long Term lbs (N)</th>
<th>Bending Radius Riser inches (cm)</th>
<th>Long Term inches (cm)</th>
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<tbody>
<tr>
<td>4</td>
<td>0.46 (11.8)</td>
<td>79 (117)</td>
<td>89 (132)</td>
<td>150 (660)</td>
<td>100 (440)</td>
<td>7.0 (17.7)</td>
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<td></td>
</tr>
<tr>
<td>6</td>
<td>0.46 (11.8)</td>
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<td>82 (122)</td>
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<td>100 (440)</td>
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<tr>
<td>12</td>
<td>0.51 (13.0)</td>
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</tr>
<tr>
<td>24</td>
<td>0.62 (15.7)</td>
<td>129 (198)</td>
<td>144 (215)</td>
<td>300 (1320)</td>
<td>150 (660)</td>
<td>9.3 (23.6)</td>
<td>5.3 (13.4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>0.84 (21.3)</td>
<td>247 (367)</td>
<td>273 (407)</td>
<td>300 (1320)</td>
<td>150 (660)</td>
<td>7.9 (20.0)</td>
<td>5.2 (13.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>0.94 (24)</td>
<td>256 (395)</td>
<td>294 (433)</td>
<td>300 (1320)</td>
<td>150 (660)</td>
<td>14.2 (36.0)</td>
<td>9.4 (24.0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>0.94 (24)</td>
<td>256 (395)</td>
<td>294 (433)</td>
<td>300 (1320)</td>
<td>150 (660)</td>
<td>14.2 (36.0)</td>
<td>9.4 (24.0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>1.10 (27.9)</td>
<td>355 (530)</td>
<td>401 (597)</td>
<td>300 (1320)</td>
<td>150 (660)</td>
<td>16.5 (41.9)</td>
<td>11.0 (27.9)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>96</td>
<td>1.21 (30.7)</td>
<td>472 (705)</td>
<td>507 (755)</td>
<td>300 (1320)</td>
<td>150 (660)</td>
<td>18.1 (46.1)</td>
<td>12.1 (30.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>144</td>
<td>1.37 (34.8)</td>
<td>498 (742)</td>
<td>534 (796)</td>
<td>300 (1320)</td>
<td>150 (660)</td>
<td>19.8 (50.3)</td>
<td>13.2 (33.5)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Part # | Description

Contact Light Brigade for part number, configuration, description, and spec sheet.
Aerial FTTx Drop Cable

Aerial drop cable is specifically designed for fiber-to-the-subscriber applications. It is a round, all-dielectric cable ideally suited for self-supporting drop-type installations as well as in lashed or conduit builds.

Features
- Designed for use with inexpensive attachment hardware.
- Compatible with standard splice closures.
- Self-supporting; no messenger needed.
- Small cross section for maximum density in closures and conduit.

6-Fiber Design
Typical spans with 2.0% installation sag:
- NESC Heavy 100 ft (30 meters).
- NESC Medium 185 ft (56 meters).
- NESC Light 370 ft (113 meters).

12-Fiber Design
Typical spans with 2.0% installation sag:
- NESC Heavy 75 ft (23 meters).
- NESC Medium 140 ft (43 meters).
- NESC Light 260 ft (75 meters).

Note: Typical installations should not be more than 4-6 spans. Point-to-point distance should not exceed 400 ft.

Temperature Range
- Operating: –40°C to + 70°C
- Storage: –50°C to + 70°C
- Installation: –30°C to + 70°C

Cable Components
polyethylene outer jacket
gel-filled buffer tube
optical fibers
strength elements
water-blocking system

Mechanical Data

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Maximum Loading Operating Tension</th>
<th>Minimum Bending Radius (Dynamic)</th>
<th>Minimum Bending Radius (Static)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lbs</td>
<td>N</td>
<td>inches</td>
</tr>
<tr>
<td>1-6</td>
<td>270</td>
<td>1113</td>
<td>5</td>
</tr>
<tr>
<td>7-12</td>
<td>270</td>
<td>1113</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: AFL recommends coiling a minimum of 12 feet (3.6 meters) into 6 inch (0.15 meters) loops at the entrance to all splice closures.

Part # | Description
--- | ---
Contact Light Brigade for part number, configuration, description, and spec sheet.
Spider Web™ Ribbon – Interconnect Premise MicroCore® Cable with SWR™ Technology

Interconnect Premise Microcore Cables are designed for MTP®/MPO terminations and meet the interconnect standards of Telcordia GR-409. To minimize the cable’s diameter, multiple colored 250 µm fibers and aramid strands are packaged in a high performance PVC jacket. Fiber counts of 12 and 24 fibers are available (contact AFL for higher fiber counts).

SWR is a bonded fiber design allowing for either a highly efficient ribbonizing application or for individual fiber break-outs. This flexibility allows for the application of a single cable type to cover a diverse set of applications. High-density round designs allow for the most efficient use of space and materials to combine for a cost-effective solution.

Temperature Range
Operating: 0°C to +70°C
Storage: -40°C to +75°C

Applications
• Building interconnections
• Data centers and central offices
• Anywhere MTP®/MPO connections can be used
• High density interconnects
• 40G and 100G Ethernet architecture

Features
• Plenum NFPA 262 rated
• LSZH cables compliant to IEC60332, IEC60754, and IEC61034
• Tested to meet or exceed GR-409-CORE
• Compliant to Directive 2002/95/EC (RoHS)
• 3.0 mm outer diameter for round boot 12-count MTP®/MPO connectors
• 3.0 mm outer diameter for round boot 24-count MTP®/MPO connectors
• Exceptional skew performance

Mechanical Data

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Nominal Diameter</th>
<th>Weight lbs/1000 FT (kg/km)</th>
<th>Tension lbs (n)</th>
<th>Bending Radius inches (cm)</th>
<th>Installation</th>
<th>Long Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>0.12 (3.0)</td>
<td>6.0 (9.0)</td>
<td>22 (100)</td>
<td>1.8 (4.5)</td>
<td>1.2 (3.0)</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>0.12 (3.0)</td>
<td>5.3 (8.0)</td>
<td>22 (100)</td>
<td>1.8 (4.5)</td>
<td>1.2 (3.0)</td>
<td></td>
</tr>
</tbody>
</table>

Part # | Description
Contact Light Brigade for part number, configuration, description, and spec sheet.
Cable Preparation Tools

The successful installation and activation of a fiber optic network requires the technician to employ correct handling and preparation techniques from the moment the cable reels are received, to the final splicing and connectorization of the cables in closures and panels.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-2CS</td>
<td>Cable slitter.</td>
</tr>
<tr>
<td>T-2RT</td>
<td>Ideal ring tool.</td>
</tr>
<tr>
<td>T-39S</td>
<td>Jacket stripper.</td>
</tr>
<tr>
<td>T-2CK</td>
<td>Cable knife.</td>
</tr>
<tr>
<td>T-2SH</td>
<td>Cable sheath cutter.</td>
</tr>
</tbody>
</table>

Miller MSAT Mid-Span Access Tool

**Features**

- Quickly and easily access fibers in 2, 2.5 and 3 mm buffer tubes in a mid-span location without fiber damage.
- All blades precisely factory mounted in tube slitting channels with no adjustment required by the installer.
- Tool design incorporates buffer tube size gages on the tool body for ease of selecting proper tube slitting channel.
- Convenient spring loaded lever opens and closes the tool and lever becomes flush with the top of the tool body when closed.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-3MSAT</td>
<td>MSAT mid-span access tool</td>
</tr>
<tr>
<td>T-5MSAT</td>
<td>MSAT mid-span access tool for 1.9 mm to 3.0 mm</td>
</tr>
</tbody>
</table>

Cutting Tools

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-2SH</td>
<td>Cable sheath cutter.</td>
</tr>
<tr>
<td>T-2SHB</td>
<td>Cable sheath cutter – replacement blade.</td>
</tr>
<tr>
<td>T-2CKC</td>
<td>Cable cutter for up to .75 inch (19 mm) cable.</td>
</tr>
<tr>
<td>T-2OPGW</td>
<td>Mini SST pipe cutter 1/8” to 5/8”.</td>
</tr>
<tr>
<td>T-2BC</td>
<td>Small bolt cutters – OPGW strands 12”.</td>
</tr>
<tr>
<td>T-2CC</td>
<td>Clauss Kevlar cutters.</td>
</tr>
<tr>
<td>T-2KV</td>
<td>Kevlar shears with pouch.</td>
</tr>
<tr>
<td>T-2SC</td>
<td>Splicer’s scissors.</td>
</tr>
<tr>
<td>T-2CKSC</td>
<td>Cable splicer’s kit; includes: cable knife, splicer’s scissors and leather holster.</td>
</tr>
</tbody>
</table>

Stripping Tools

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-2CCS</td>
<td>Fiber cable sheath stripper.</td>
</tr>
<tr>
<td>T-31S</td>
<td>No Niks Strippers – 150 Micron – silver handle.</td>
</tr>
<tr>
<td>T-32D</td>
<td>No Niks Strippers – 200 Micron – red handle.</td>
</tr>
<tr>
<td>T-3CFS</td>
<td>Clauss Fiber Optic Strippers – For stripping 125 µm fiber with 250 µm buffer coating.</td>
</tr>
<tr>
<td>T-3MS</td>
<td>Miller strippers.</td>
</tr>
</tbody>
</table>
### Cable Preparation Tools

#### Miscellaneous Tools

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-2CW</td>
<td>Multisocket can wrench.</td>
</tr>
<tr>
<td>T-3JP</td>
<td>8” joint pliers.</td>
</tr>
<tr>
<td>T-3LP</td>
<td>8” lineman’s pliers.</td>
</tr>
<tr>
<td>T-3NP</td>
<td>6” needle nose pliers.</td>
</tr>
<tr>
<td>T-3SDP</td>
<td>Phillips screwdriver.</td>
</tr>
<tr>
<td>T-3SDS</td>
<td>Standard screwdriver.</td>
</tr>
<tr>
<td>T-3SR</td>
<td>Seam ripper.</td>
</tr>
<tr>
<td>T-3TM</td>
<td>12” tape measure.</td>
</tr>
<tr>
<td>T-504</td>
<td>4 tool leather storage case.</td>
</tr>
<tr>
<td>T-5ETB</td>
<td>3M electricians tape – black.</td>
</tr>
<tr>
<td>T-5ET5COLOR</td>
<td>Color-coded electricians tape – Five rolls – Blue, green, yellow, red, white.</td>
</tr>
<tr>
<td>T-5HSG</td>
<td>Wagner heat gun.</td>
</tr>
<tr>
<td>T-5SPM</td>
<td>Sharpie permanent marker.</td>
</tr>
<tr>
<td>T-5STB</td>
<td>Deluxe tool bag – 16” x 12” x 9”.</td>
</tr>
</tbody>
</table>

#### Cable Tables

**Features**

- Folded thickness 2-3/4”
- Hook and loop cable control strip.
- Corner mounting points allow for additional accessories or the use of grounding rods as alternative legs.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-836</td>
<td>Compact cable table 28”w, 22”d, 28”h (optional leg extensions provide 29” and 36” height).</td>
</tr>
<tr>
<td>T-853</td>
<td>Van sized cable table 44”w, 22”d, 29”h.</td>
</tr>
<tr>
<td>T-870</td>
<td>Large cable table 58”w, 22”d, 29”h.</td>
</tr>
</tbody>
</table>

#### Cable Table Accessories

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-8100</td>
<td>Lamp with base for cable tables.</td>
</tr>
<tr>
<td>T-8200</td>
<td>Flex Arm magnifier for cable tables.</td>
</tr>
<tr>
<td>T-8300</td>
<td>Lamp attachment magnifier for cable tables.</td>
</tr>
<tr>
<td>T-83600</td>
<td>Tote bag for compact cable table.</td>
</tr>
<tr>
<td>T-8400</td>
<td>Carrying case for lamps.</td>
</tr>
<tr>
<td>T-8500</td>
<td>Universal clamp for cable tables.</td>
</tr>
<tr>
<td>T-85300</td>
<td>Tote bag for van sized cable table.</td>
</tr>
<tr>
<td>T-8LE36</td>
<td>Leg extension kit for compact cable table (28x22).</td>
</tr>
<tr>
<td>T-8TB</td>
<td>T-bar for cable table.</td>
</tr>
</tbody>
</table>
Cable Assemblies

Our custom cable assemblies are built to your specification in our state-of-the-art lab using automated polishing equipment. Whether your need is patch cords, pigtails, preterminated patch panels, or preterminated multifiber cables, we offer multimode and single-mode terminations with UPC and APC polishes, in customized lengths. Every assembly undergoes a rigorous testing and inspection process to ensure it meets TIA-526-7 and TIA-526-14 attenuation and reflection values, TIA-455-200 and IEC 61300-3-35 surface quality standards and interferometry values (for single-mode terminations), and is then shipped with its test report.

We offer standard length simplex and duplex assemblies (1, 2, 3, 5, 7, and 10 meter) with any standard connectors. Non-standard lengths and multifiber cable assemblies are also available.

### Patch Cords

#### Single-mode

<table>
<thead>
<tr>
<th>8.33 µm Duplex</th>
<th>ST-ST</th>
<th>ST-SC</th>
<th>SC-SC/APC</th>
<th>SC-SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC/APC-SC/APC</td>
<td></td>
<td></td>
<td>SC/APC-LC/APC</td>
<td>FC/APC-LC/APC</td>
</tr>
<tr>
<td>FC/APC-FC</td>
<td></td>
<td></td>
<td>LC-LC</td>
<td>LC-ST</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LC-SC</td>
<td>LC-SC</td>
</tr>
<tr>
<td>FC-LC</td>
<td></td>
<td></td>
<td>LC/APC-LC/APC</td>
<td>SC-LC/APC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>FC-FPC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8.33 µm Simplex</th>
<th>ST-ST</th>
<th>SC-ST</th>
<th>SC/APC-SC</th>
<th>SC-SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC/APC-FC/APC</td>
<td></td>
<td></td>
<td>SC/APC-SC</td>
<td>SC-SC</td>
</tr>
<tr>
<td>SC/APC-SC/APC</td>
<td></td>
<td></td>
<td>SC/APC-Fc</td>
<td>SC/APC-LC/APC</td>
</tr>
<tr>
<td>LC/APC-LC/APC</td>
<td></td>
<td></td>
<td>LC-SC</td>
<td>LC-SC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LC-Fc</td>
<td>LC-Fc</td>
</tr>
</tbody>
</table>

#### Multimode

<table>
<thead>
<tr>
<th>50 µm Duplex (2G)</th>
<th>ST-ST</th>
<th>ST-SC</th>
<th>SC-SC</th>
<th>MTRJ-SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC-LC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC-ST</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC-SC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>50 µm Simplex (2G)</th>
<th>ST-ST</th>
<th>SC-ST</th>
<th>SC-SC</th>
<th>LC-LC</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC-ST</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>50 µm OM3 laser-speed (10G)</th>
<th>SC-SC</th>
<th>LC-LC</th>
<th>LC-SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>350 m distance</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>50 µm OM4 laser-speed (40/100G)</th>
<th>SC-SC</th>
<th>LC-LC</th>
<th>LC-SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>550 m distance</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>62.5 µm Simplex</th>
<th>ST-ST</th>
<th>SC-SC</th>
<th>MTRJ-SC</th>
<th>ST-SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTRJ-MTRJ</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTRJ-ST</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC-SC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTRJ-LC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>62.5 µm Simplex</th>
<th>ST-ST</th>
<th>SC-SC</th>
<th>SC-ST</th>
<th>LC-LC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In addition to our wide array of patch cords, we offer:

- Multifiber trunk cables from 12 to 144 fibers.
- Self-supporting aerial, direct buried, and FTTx drop cables.
- MPO/MTP plug-and-play cables.
- Mini-armor multifiber cables.
- Mini-armor patch cords.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contact Light Brigade for part number, configuration, description, and spec sheet.</td>
</tr>
</tbody>
</table>
Fanout Kits

**Corning Fanout Kits**

Corning indoor buffer tube fanout kits are specifically designed for the termination of 6- and 12-fiber buffer tubes. These fanout kits provide the ultimate solution for users who want to field install connectors on 250-µm coated fibers. The kits provide the most compact, easy-to-install fanout solution requiring no additional hardware or space than that required for terminating tight-buffered cables. Indoor kits feature a 900-µm fanout assembly that is color coded to match the fiber color scheme.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-FS06-900C</td>
<td>Corning fanout kits, 6 fiber color coded buffer tubes with 25” leads.</td>
</tr>
<tr>
<td>B-FS12-900C</td>
<td>Corning fanout kits, 12 fiber color coded buffer tubes with 25” leads.</td>
</tr>
</tbody>
</table>

**Loose Tube Fanout Kits**

Fanout kits route 250 µm fiber into 900 µm tubes ready for connectorization. Easily installed in minutes, these kits require no special tools. Color coded tubing allows for easy identification. The furcation unit snaps together, eliminating epoxy. Loose tube fanout kits are available in 6 and 12 fiber configurations.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
<th>Fiber Count</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-C189826</td>
<td>Loose Tube Fanout Kit (for 3.0 mm tube)</td>
<td>6 fibers</td>
<td>24 inches</td>
</tr>
<tr>
<td>B-C189818</td>
<td>Loose Tube Fanout Kit (for 3.0 mm tube)</td>
<td>12 fibers</td>
<td>24 inches</td>
</tr>
<tr>
<td>B-C189842</td>
<td>Ribbon-Link® Fanout Kit</td>
<td>6 fibers</td>
<td>36 inches</td>
</tr>
<tr>
<td>B-C189834</td>
<td>Ribbon-Link® Fanout Kit</td>
<td>12 fibers</td>
<td>36 inches</td>
</tr>
<tr>
<td>B-C193114</td>
<td>Unitube Fanout Kit</td>
<td>6 fibers</td>
<td>36 inches</td>
</tr>
<tr>
<td>B-C193122</td>
<td>Unitube Fanout Kit</td>
<td>12 fibers</td>
<td>36 inches</td>
</tr>
</tbody>
</table>
Labels

Custom labels are available for:
- Route marking.
- Safety and environmental.
- Overlays for existing signs.
- Reflective and non-reflective.
- Sequential numbering available.

Light Brigade provides both reflective and non-reflective decals for telecom, CATV, utility, government, and commercial applications. ACP safety, warning, and hazard decals are designed to meet regulatory and industry specific standards (OSHA, ANSI/NEMA). Decals are available with standard and custom colors, custom messages, and sequential numbering.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>L-1</td>
<td>Wrap around labels, 4” x 4”.</td>
</tr>
<tr>
<td>L-1-C</td>
<td>Custom wrap around labels, 4” x 4”.</td>
</tr>
<tr>
<td>L-1-Y</td>
<td>Wrap around labels, 4” x 4”, yellow with black ink. Non-stock item, non-returnable, non-refundable minimum of 500 pieces.</td>
</tr>
<tr>
<td>L-2</td>
<td>CAUTION adhesive backed labels, size: 4” x 1-3/4”.</td>
</tr>
<tr>
<td>L-3</td>
<td>CAUTION tie wrap marker, 1-3/4” x 3-7/8”.</td>
</tr>
<tr>
<td>L-3-Y</td>
<td>Yellow CAUTION tie wrap marker, 1-3/4” x 3-7/8”.</td>
</tr>
<tr>
<td>L-4</td>
<td>Numbered cable labeler, labels 0-9.</td>
</tr>
<tr>
<td>L-5</td>
<td>Safety laser labels, 4” x 2-1/2”.</td>
</tr>
</tbody>
</table>
Connectors and Adapters

The key to any fiber optic system is the quality of its terminations. We offer quality optical connectors, plugs, adapters, and other terminations in a wide variety of styles. Regardless of your application, we can provide guidance to help you determine what works best for you, including the proper tools, consumables, and inspection and test equipment that you need to ensure consistent, reliable operation of your system.

### Epoxy Polish Connectors

#### SC

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-1825-03C</td>
<td>SC FiberSource multimode 3.0 mm connector (crimp with Dies .128, .190).</td>
</tr>
<tr>
<td>F-1826-03C</td>
<td>SC FiberSource single-mode 3.0 mm 125.5 µm connector (crimp with Dies .128, .190).</td>
</tr>
</tbody>
</table>

#### FC

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-1225-03C</td>
<td>FC FiberSource multimode 3.0 mm 127 µm connector (crimp with Dies .128, .190).</td>
</tr>
<tr>
<td>F-1226-03C</td>
<td>FC FiberSource single-mode 3.0 mm 125.5 µm connector (crimp with Dies .128, .190).</td>
</tr>
</tbody>
</table>

Note: NTT AT standard 2.0 mm key.

#### ST

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-1125-03C</td>
<td>ST FiberSource multimode 3.0 mm 127 µm connector (non-crimp, but can be crimped with .137).</td>
</tr>
<tr>
<td>F-1126-03C</td>
<td>ST FiberSource single-mode 3.0 mm 125.5 µm connector (non crimp style, but can be crimped with .141).</td>
</tr>
</tbody>
</table>

#### LC

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-0025S-03C</td>
<td>LC Simplex multimode connectors for 3.0 mm cable (crimp with .128 round die size) 3.0 mm crimp ring, eyelt, beige housing and boot.</td>
</tr>
<tr>
<td>F-0026D-03C</td>
<td>LC Duplex single-mode connectors for 3.0 mm cable (crimp with .128 round die size) 3.0 mm crimp ring, eyelt, blue housing, white boot and removable blue clip.</td>
</tr>
<tr>
<td>F-0026S-03C</td>
<td>LC Simplex single-mode connectors for 3.0 mm cable (crimp with .128 round die size) 3.0 mm crimp ring, eyelt, blue housing with white boot.</td>
</tr>
<tr>
<td>F-0026S-9-03C</td>
<td>LC Simplex single-mode connectors for BTW/900 µm cable, blue housing with white boot.</td>
</tr>
<tr>
<td>F-0026D-03C</td>
<td>LC Duplex multimode connectors for 3.0 mm cable with duplex clip, 3.0 mm crimp ring, eyelt, beige housing, boot, and removable beige duplex clip.</td>
</tr>
</tbody>
</table>
## Connectors and Adapters

### FastConnect® Mechanical Connectors

**Features**

FASTConnect connectors are factory pre-polished, field installable connectors that completely eliminate the need for hand polishing in the field. Proven mechanical splice technology ensuring precision fiber alignment, a factory precleaved fiber stub and a proprietary index-matching gel combine to offer an immediate low loss termination to either single-mode or multimode optical fibers. FASTConnect connectors are compatible with 250 µm and 900 µm optical fibers, as well as 900 µm, 2 mm, and 3 mm cordage. All primary fiber types are supported, and each connector is color coded per industry standard requirements to aid in identification during and after installation.

A factory-installed wedge clip (included with each connector) is removed and discarded upon completion of the termination. Incorporated into this device is an innovative, translucent wedge enabling the use of a common visual fault identifier to provide a pass/fail signal once physical contact is achieved.

#### LC

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-0050-13</td>
<td>FAST-LC, ZR, 50 µm, multimode, pre-polished, 900 µm, pack of 6.</td>
</tr>
<tr>
<td>F-0050-100-13</td>
<td>FAST-LC, ZR, 50 µm, multimode, pre-polished, 900 µm, pack of 100.</td>
</tr>
<tr>
<td>F-0050LO-13</td>
<td>FAST-LC, ZR, 50 µm 10G, multimode, pre-polished, pack of 6.</td>
</tr>
<tr>
<td>F-0062-100-13</td>
<td>FAST-LC, ZR, 62.5 µm, multimode, pre-polished, 900 µm, pack of 100.</td>
</tr>
<tr>
<td>F-0062-13</td>
<td>FAST-LC, ZR, 62.5 µm, multimode, pre-polished, 900 µm, pack of 6.</td>
</tr>
<tr>
<td>F-00SM5-13</td>
<td>FAST-LC, ZR, single-mode, pre-polished, 900 µm, pack of 6.</td>
</tr>
<tr>
<td>F-00SM5-100-13</td>
<td>FAST-LC, ZR, single-mode, pre-polished, 900 µm, pack of 100.</td>
</tr>
</tbody>
</table>

#### ST

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-1150-13</td>
<td>FAST-ST, ZR, 50 µm, multimode, pre-polished, 900 µm, pack of 6.</td>
</tr>
<tr>
<td>F-1150-100-13</td>
<td>FAST-ST, ZR, 50 µm, multimode, pre-polished, 900 µm, pack of 100.</td>
</tr>
<tr>
<td>F-1162-100-13</td>
<td>FAST-ST, ZR, 62.5 µm, multimode, pre-polished, 900 µm, pack of 100.</td>
</tr>
<tr>
<td>F-1162-13</td>
<td>FAST-ST, ZR, 62.5 µm, multimode, pre-polished, 900 µm, pack of 6.</td>
</tr>
<tr>
<td>F-11SM5-100-13</td>
<td>FAST-ST, ZR, single-mode, pre-polished, 900 µm, pack of 100.</td>
</tr>
<tr>
<td>F-11SM5-13</td>
<td>FAST-ST, ZR, single-mode, pre-polished, 900 µm, pack of 6.</td>
</tr>
</tbody>
</table>

#### SC

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-1850-13</td>
<td>FAST-SC, ZR, 50 µm, multimode, pre-polished, 900 µm, pack of 6.</td>
</tr>
<tr>
<td>F-1850-100-13</td>
<td>FAST-SC, ZR, 50 µm, multimode, pre-polished, 900 µm, pack of 100.</td>
</tr>
<tr>
<td>F-18SM5-100</td>
<td>FAST-SC, ZR, single-mode, pre-polished, 900 µm, pack of 100.</td>
</tr>
</tbody>
</table>
FuseConnect® Fusion Spliced Field-Terminated Connectors

**Features**
- Field installable.
- Only four components.
- No adhesives, crimping or polishing.
- True APC performance.
- SM compliance to GR-326-CORE.
- MM compliance to TIA-568-C.3.
- Compatible with most fusion splicers.

### Connectors and Adapters

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-FUSE-FC-3SMU-6</td>
<td>FuseConnect, FC, UPC, single-mode, 3 mm, pack of 6, blue.</td>
</tr>
<tr>
<td>F-FUSE-LC-2M-MM50-6</td>
<td>FuseConnect, LC, PC, multimode, 50 µm, 2.0 mm, pack of 6, black.</td>
</tr>
<tr>
<td>F-FUSE-LC-2M-MM50L-6</td>
<td>FuseConnect, LC, PC, multimode, 50 µm 10G, 2.0 mm, pack of 6, aqua.</td>
</tr>
<tr>
<td>F-FUSE-LC-2M-MM62-6</td>
<td>FuseConnect, LC, PC, multimode, 62.5 µm, 2.0 mm, pack of 6, blue.</td>
</tr>
<tr>
<td>F-FUSE-LC-2M-SMU-6</td>
<td>FuseConnect, LC, UPC, single-mode, 2.0 mm, pack of 6, blue.</td>
</tr>
<tr>
<td>F-FUSE-LC-RU-MM50-6</td>
<td>FuseConnect, LC, PC, multimode, 50 µm 900 µm, pack of 6, black.</td>
</tr>
<tr>
<td>F-FUSE-LC-RU-MM50L-6</td>
<td>FuseConnect, LC, PC, multimode, 50 µm 10G, 900 µm, pack of 6, aqua.</td>
</tr>
<tr>
<td>F-FUSE-LC-RU-MM62-6</td>
<td>FuseConnect, LC, PC, multimode, 62.5 µm, 2.0 mm, pack of 6, black.</td>
</tr>
<tr>
<td>F-FUSE-LC-2/I3M-MM50-6</td>
<td>FuseConnect, SC, PC, multimode, 50 µm 10G, 2.0 and 3.0 mm, pack of 6, black.</td>
</tr>
<tr>
<td>F-FUSE-LC-2/I3M-MM50L-6</td>
<td>FuseConnect, SC, PC, multimode, 50 µm 10G, 2.0 and 3.0 mm, pack of 6, aqua.</td>
</tr>
<tr>
<td>F-FUSE-LC-2/I3M-MM62-6</td>
<td>FuseConnect, SC, PC, multimode, 62.5 µm, 2.0 and 3.0 mm, pack of 6, green.</td>
</tr>
<tr>
<td>F-FUSE-LC-2/I3M-SMU-6</td>
<td>FuseConnect, SC, UPC, single-mode, 2.0 and 3.0 mm, pack of 6, blue.</td>
</tr>
<tr>
<td>F-FUSE-LC-RU-MM50-6</td>
<td>FuseConnect, SC, PC, multimode, 50 µm 900 µm, pack of 6, black.</td>
</tr>
<tr>
<td>F-FUSE-LC-RU-MM50L-6</td>
<td>FuseConnect, SC, PC, multimode, 50 µm 10G, 900 µm, pack of 6, aqua.</td>
</tr>
<tr>
<td>F-FUSE-LC-RU-MM62-6</td>
<td>FuseConnect, SC, PC, multimode, 62.5 µm, 900 µm, pack of 6, black.</td>
</tr>
<tr>
<td>F-FUSE-LC-RU-SMA-6</td>
<td>FuseConnect, SC, APC, single-mode, 900 µm, pack of 6, green.</td>
</tr>
<tr>
<td>F-FUSE-LC-RU-SMU-6</td>
<td>FuseConnect, SC, UPC, single-mode, 900 µm, pack of 6, blue.</td>
</tr>
<tr>
<td>F-FUSE-ST-3SMU-6</td>
<td>FuseConnect, ST, UPC, single-mode, 3 mm, pack of 6, blue.</td>
</tr>
<tr>
<td>F-FUSE-ST-9U-MM62-6</td>
<td>FuseConnect, ST, PC, multimode, 62.5 µm, 2.0 mm, pack of 6, beige.</td>
</tr>
<tr>
<td>F-FUSE-ST-9U-SMU-6</td>
<td>FuseConnect, ST, UPC, single-mode, 900 µm, pack of 6, blue.</td>
</tr>
<tr>
<td>F-FUSE-ST2M62-6</td>
<td>FuseConnect, ST, PC, multimode, 62.5 µm, 2.0 mm, pack of 6, beige.</td>
</tr>
<tr>
<td>F-FUSE-ST2SMU-6</td>
<td>FuseConnect, ST, UPC, single-mode, 2.0 mm, pack of 6, blue.</td>
</tr>
</tbody>
</table>

### Unicam Connectors

#### LC

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-0026-06C</td>
<td>LC unicam, single-mode, ceramic ferrule.</td>
</tr>
</tbody>
</table>

#### ST

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-1125-UNIC</td>
<td>ST unicam, multimode 125 µm, composite ferrule.</td>
</tr>
<tr>
<td>F-1150-06C</td>
<td>ST unicam, multimode 50/125, ceramic ferrule.</td>
</tr>
<tr>
<td>F-118X-06C</td>
<td>ST unicam, single-mode, super PC–40, ceramic ferrule.</td>
</tr>
<tr>
<td>F-1162-06C</td>
<td>ST unicam, multimode, 62.5/125, ceramic ferrule.</td>
</tr>
<tr>
<td>F-118U-06C</td>
<td>ST unicam, single-mode, ultra PC–55, ceramic ferrule.</td>
</tr>
</tbody>
</table>

#### SC

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-188X-06C</td>
<td>SC unicam, single-mode, super PC–40, ceramic ferrule.</td>
</tr>
<tr>
<td>F-1825-UNIC</td>
<td>SC unicam, multimode 125 µm, composite ferrule.</td>
</tr>
<tr>
<td>F-1862-06C</td>
<td>SC unicam, multimode, 62.5/125, ceramic ferrule.</td>
</tr>
<tr>
<td>F-188U-06C</td>
<td>SC unicam, single-mode, ultra PC–55, ceramic ferrule.</td>
</tr>
</tbody>
</table>
# Connectors and Adapters

## Connectors and Adapters

### Connectors and Adapters

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-28SM-03</td>
<td>SC Simplex single-mode adapter.</td>
</tr>
<tr>
<td>F-28SM-APC</td>
<td>SC/APC Simplex single-mode adapter.</td>
</tr>
<tr>
<td>F-28BMM-12</td>
<td>SC Duplex multimode adapter with phosphorous bronze sleeve.</td>
</tr>
<tr>
<td>F-21SM-01T</td>
<td>ST single-mode adapter.</td>
</tr>
<tr>
<td>F-21MM-03</td>
<td>ST multimode adapters.</td>
</tr>
<tr>
<td>F-21SM-01F</td>
<td>D4 adapter – single-mode / multimode.</td>
</tr>
<tr>
<td>F-21SM-02F</td>
<td>FC adapters – single-mode / multimode – threaded.</td>
</tr>
<tr>
<td>F-2040-08S</td>
<td>SMA 905 – 100/140.</td>
</tr>
<tr>
<td>F-1625-08S</td>
<td>SMA 905 – 50 and 62.5/125.</td>
</tr>
<tr>
<td>F-1640-08S</td>
<td>SMA 906 – 100/140.</td>
</tr>
</tbody>
</table>

### ST

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-6811-62</td>
<td>ST/Male to ST/Female – multimode.</td>
</tr>
<tr>
<td>F-6811SM-13</td>
<td>ST/Male To ST/Female – single-mode.</td>
</tr>
<tr>
<td>F-6812-62</td>
<td>ST/Male to FC/Female – multimode.</td>
</tr>
<tr>
<td>F-6812SM-13</td>
<td>ST/Male To FC/Female – single-mode.</td>
</tr>
<tr>
<td>F-6816-62</td>
<td>ST/Male to SMA906/Female – multimode 62.5/125.</td>
</tr>
<tr>
<td>F-6818SM-13</td>
<td>ST/Male to SC/Female – multimode.</td>
</tr>
</tbody>
</table>

### FC

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-6821-62</td>
<td>FC/Male to ST/Female – multimode.</td>
</tr>
<tr>
<td>F-6821SM-13</td>
<td>FC/Male To ST/Female – single-mode.</td>
</tr>
<tr>
<td>F-6822-62</td>
<td>FC/Male to FC/Female – multimode.</td>
</tr>
<tr>
<td>F-6822SM-13</td>
<td>FC/Male To FC/Female – single-mode.</td>
</tr>
<tr>
<td>F-6828-62</td>
<td>FC/Male to SC/Female – multimode.</td>
</tr>
<tr>
<td>F-6828SM-13</td>
<td>FC/Male To SC/Female – single-mode.</td>
</tr>
</tbody>
</table>

### Hybrid Adapter Male/Female

### SC

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-6881-62</td>
<td>SC/Male to ST/Female – multimode.</td>
</tr>
<tr>
<td>F-6881SM-13</td>
<td>SC/Male To ST/Female – single-mode.</td>
</tr>
<tr>
<td>F-6882-62</td>
<td>SC/Male to FC/Female – multimode.</td>
</tr>
<tr>
<td>F-6882SM-13</td>
<td>SC/Male To FC/Female – single-mode.</td>
</tr>
<tr>
<td>F-6888-62</td>
<td>SC/Male to SC/Female – multimode.</td>
</tr>
<tr>
<td>F-6888SM-13</td>
<td>SC/Male To SC/Female – single-mode.</td>
</tr>
</tbody>
</table>

### FC

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-6821-62</td>
<td>FC/Male to ST/Female – multimode.</td>
</tr>
<tr>
<td>F-6821SM-13</td>
<td>FC/Male To ST/Female – single-mode.</td>
</tr>
<tr>
<td>F-6822-62</td>
<td>FC/Male to FC/Female – multimode.</td>
</tr>
<tr>
<td>F-6822SM-13</td>
<td>FC/Male To FC/Female – single-mode.</td>
</tr>
<tr>
<td>F-6828-62</td>
<td>FC/Male to SC/Female – multimode.</td>
</tr>
<tr>
<td>F-6828SM-13</td>
<td>FC/Male To SC/Female – single-mode.</td>
</tr>
</tbody>
</table>

### SMA906

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-6861-62</td>
<td>SMA906/Male to ST/Female – multimode 62.5/125.</td>
</tr>
</tbody>
</table>
### Connector Termination Tools

#### Scribe Tools

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-1CC-60</td>
<td>Diamond Scribe – 60 cone angled tip.</td>
</tr>
<tr>
<td>T-1CS30W</td>
<td>Clauss carbide scribe tool.</td>
</tr>
<tr>
<td>T-1CW-90</td>
<td>Diamond scribe – 90 wedge tip.</td>
</tr>
<tr>
<td>T-1SS</td>
<td>Sapphire scribe.</td>
</tr>
</tbody>
</table>

#### Crimp Tools

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
</table>
## Connector Termination Tools

### Hand Polishing Supplies

#### Pads

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
</table>
| P-13   | Neoprene rubber polishing pad – 5 1/2” x 5 1/2”.

#### Plates

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
</table>
| P-14   | Lexan polishing plate – 1/4” x 9” x 13”.
| P-1-P  | Acrylic polishing plates – 5” x 7”.

#### Pucks

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
</table>
| P-21   | Polishing pucks – ST (call for quote).
| P-21-P | Plastic universal polishing puck.
| P-22   | Polishing pucks – FC.
| P-29   | Polishing pucks – SC and ST.
| P-30   | LC polishing puck (simplex/metal).
| P-30-P | LC co-polymer polishing puck – simplex.

#### Polishing Paper

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
</table>
| P-3XA-01-50 | Polishing paper – 6” x 3” rectangles (package of 50) – 1 micron (green).
| P-3XA-03-50 | Polishing paper – 6” x 3” rectangles (package of 50) – 3 micron (pink).
| P-3XA-05-50 | Polishing paper – 6” x 3” rectangles (package of 50) – 5 micron (brown).
| P-3XA-09-50 | Polishing paper – 6” x 3” rectangles (package of 50) – 9 micron (blue).
| P-3XA-12-50 | Polishing paper – 6” x 3” rectangles (package of 50) – 12 micron (yellow).
| P-3XA-P3-50 | Polishing paper – 6” x 3” rectangles (package of 50) – 3 micron (slate/white).
| P-3XA-P5-50 | Polishing paper – 6” x 3” rectangles (package of 50) – 5 micron.
| P-3XA-01 | Polishing paper – 6” x 3” rectangles (package of 100) – 1 micron (light pink).
| P-3XA-03 | Polishing paper – 6” x 3” rectangles (package of 100) – 3 micron (light yellow).
| P-3XA-05 | Polishing paper – 6” x 3” rectangles (package of 100) – 5 micron (light grey).
| P-3XA-09 | Polishing paper – 6” x 3” rectangles (package of 100) – 9 micron (sky blue).
| P-3XA-12 | Polishing paper – 6” x 3” rectangles (package of 100) – 12 micron (red).
| P-3XA-15 | Polishing paper – 6” x 3” rectangles (package of 100) – 16 micron (light orange).
| P-3XA-P3 | Polishing paper – 6” x 3” rectangles (package of 100) – .3 micron (light blue).
| P-3XA-P5 | Polishing paper – 6” x 3” rectangles (package of 100) – .5 micron (white).
| P-3XB-01 | Polishing paper – 8.5” x 11” rectangles (package of 50) – 1 micron (green).
| P-3XB-03 | Polishing paper – 8.5” x 11” rectangles (package of 50) – 3 micron (pink).
| P-3XB-05 | Polishing paper – 8.5” x 11” rectangles (package of 50) – 5 micron (brown).
| P-3XB-12 | Polishing paper – 8.5” x 11” rectangles (package of 50) – 12 micron (yellow).
| P-3XB-15 | Polishing paper – 8.5” x 11” rectangles (package of 50) – 15 micron (gray).
| P-3XB-P3 | Polishing paper – 8.5” x 11” rectangles (package of 50) – .3 micron (slate).
| P-3XF-01 | Diamond polishing paper 6 x 3 – one sheet – 1 um (lavender).
| P-3XF-03 | Diamond polishing paper 6 x 3 – one sheet – 3 um (pink).
| P-3XF-30 | Diamond polishing paper 6 x 3 – one sheet – 30 um (green).
| P-3XF-P1 | Diamond polishing paper 6 x 3 – one sheet – .1 um (gray).

#### Epoxies

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
</table>
| H-AN-AP-S | Loctite anaerobic adhesive .34 oz (648) and primer 1.75 oz. with (1) syringe and (10) tips.
| H-SYA-01 - P | Metal tip syringes – single syringe.
| H-SYA-25 | Metal tip syringes – case of (25).
## Patch Panels

### 2U Rack Mount Distribution Panel
**Features**
- Provides up to 24 terminations in just 3.5” of vertical space.
- Includes 18-position splice tray.
- Standard footprint for integration into new or existing applications.
- Reversible brackets to support 19” or 23” mounting.
- Designation labels included.
- Cable clamp available.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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<tbody>
<tr>
<td></td>
<td>Contact Light Brigade for part number, configuration, description, and spec sheet.</td>
</tr>
</tbody>
</table>

### 3U Distribution Splice Panel
**Features**
- Rapid, effortless, and reliable device.
- Effective and time-saving cable splicing.
- Quick and ease of access for re-routing or adding of fibers, or adjusting of any kind.
- Management of all splices within a single housing.
- 900 µm jacket at the connector panel.
- Includes a fiber protector at the connector.
- Radius-secured storage for up to 2 meters of 900 µm jacketed fibers.
- Durable aluminum detachable face plate.
- Integrated fiber handling shields the fibers from microbend and macrobend damages.

<table>
<thead>
<tr>
<th>Part #</th>
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<tr>
<td></td>
<td>Contact Light Brigade for part number, configuration, description, and spec sheet.</td>
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</tbody>
</table>

### 4U Rack Mount Distribution Panel
**Features**
- Rapid, effortless, and reliable device.
- Effective and time-saving cable splicing.
- Quick and ease of access for re-routing or adding of fibers, or adjusting of any kind.
- Management of all splices within a single housing.
- 900 µm jacket at the connector panel.
- Includes a fiber protector at the connector.
- Radius-secured storage for up to 2 meters of 900 µm jacketed fibers.
- Durable aluminum detachable face plate.
- Integrated fiber handling shields the fibers from microbend and macrobend damages.

<table>
<thead>
<tr>
<th>Part #</th>
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<tbody>
<tr>
<td></td>
<td>Contact Light Brigade for part number, configuration, description, and spec sheet.</td>
</tr>
</tbody>
</table>
Patch Panels

Rack Mount Panels

Features

- Provides 12, 16, or 24 terminations in just 1.75” of vertical space.
- SC, FC, ST, and LC patch plates available.
- Standard footprint for integration into new or existing applications.
- Reversible brackets to support 19” or 23” mounting.
- Designation labels included.
- Cable clamp (frame mount) available.

<table>
<thead>
<tr>
<th>Description</th>
<th>Contact Light Brigade for part number, configuration, description, and spec sheet.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1U Rack Mount Panel</td>
<td></td>
</tr>
<tr>
<td>2U Rack Mount Panel</td>
<td></td>
</tr>
<tr>
<td>4U Rack Mount Panel</td>
<td></td>
</tr>
</tbody>
</table>

LGX 12/24 Port Wall Mount Panel

Features

- Multiple cable entrance ports with rubber grommets.
- Cam lock restricts access to main compartment (second lock optional).
- Ample storage slack, maintaining a 1.5” minimum bend radius.
- Mounts on 16” centers (standard stud).
- Removable doors provide increased enclosure access.
- Sturdy 16 gauge steel construction with a durable beige powder coat finish.
- SC, FC, or ST adapters pre-installed.
- Variety of preterminated cable assemblies available pre-installed (optional).

<table>
<thead>
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<th>Part #</th>
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<tbody>
<tr>
<td>Contact Light Brigade for part number, configuration, description, and spec sheet.</td>
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</tbody>
</table>

Splice Housing

Features

- Rapid, effortless, and reliable device.
- Effective and time-saving cable splicing.
- Quick and ease of access for re-routing or adding of fibers, or adjusting of any kind.
- Management of all splices within a single housing.
- 900 µm jacket at the connector panel.
- Includes a fiber protector at the connector.
- Radius-secured storage for up to 2 meters of 900 µm jacketed fibers.
- Durable aluminum detachable face plate.
- Integrated fiber handling shields the fibers from microbend and macrobend damages.

<table>
<thead>
<tr>
<th>Part #</th>
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<tbody>
<tr>
<td>Contact Light Brigade for part number, configuration, description, and spec sheet.</td>
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</tbody>
</table>
Distribution Enclosures

IDEAA Exterior Distribution Cabinet

Features
The IDEAA Exterior Distribution Cabinet (EDC) provides a convenient modular approach to centralized fiber distribution. All sizes of the EDC utilize the IDEAA splitter module to enable versatility across the platform. Its innovative jumper routing enables efficient fiber management via equal length pigtails for the entire cabinet.

- Modular distribution platform allows for incremental deployment costs and immediate cost savings.
- Small size is unobtrusive in residential deployments.
- Enhanced fiber management provides simplified routing and termination.
- Dual-door entry allows easy access to distribution and fiber management fields.
- Flexible pad and pole mounting options allow for deployment in convenient locations.
- Expandable feeder cables allow for point-to-point distribution (cross-connect).

<table>
<thead>
<tr>
<th>Part #</th>
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<tbody>
<tr>
<td></td>
<td>Contact us for specific part number and ordering information.</td>
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</tbody>
</table>

IDEAA® Exterior Wall Mount Enclosure

Features
- Rugged, weatherproof thermoplastic alloy housing.
- Cable entry/exit grommet seals.
- Versatile inner mounting plate for an IDEAA module.
- Fiber routing system.

<table>
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<tr>
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</tbody>
</table>

LightLink 320 Optical Splicing and Distribution Enclosure

Features
The LightLink LL-320 Optical Splicing and Distribution Enclosure provides for organizing, splicing, and interconnecting fibers in broadband, distribution, security, sensing, and building entrance applications. The enclosure features a stainless steel welded construction and a fully gasketed cover. Two ½” CableGrip or Myer’s™ Hub fittings securely seal cables entering the enclosure and allows for express and preterminated cable installation. The LL-320 contains one LL-2450 splice trays for up to 12 single fusion splices. Additional LL-2450 trays can be added.

- All stainless steel construction.
- CableGrip port fittings for watertight cable seal.
- Routing rings for fiber management.
- NEMA 4 Rated (IP66).
- Eight-position compression type ground bar.

<table>
<thead>
<tr>
<th>Part #</th>
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<tbody>
<tr>
<td></td>
<td>Contact for specific part number and ordering information.</td>
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</tbody>
</table>
LightLink 400b
Optical Splicing and Distribution Enclosure

Features
The LightLink (LL) 400b Optical Splicing and Distribution Enclosure provides for organizing, splicing and interconnecting fibers in FTTx, broadband, distribution and building entrance applications. Each LL-400b enclosure features a scratch resistant powder coated aluminum base and a fully gasketed cover. A unique self-sizing grommet design allows for express and preterminated cable installation. The LL-400b is a butt-style enclosure equipped with six independent cable entry/exit grommets, used for outdoor pedestal or indoor building entrance and riser splicing applications. The unit supports a maximum storage and splicing capacity of up to 240 single or 432 mass-fused fibers. When installed into an LL-400b, the Interconnect Module supports the interconnection of up to 24 SC optical bulkheads. It is used in outdoor pedestals or building mounted LL-400b enclosures where interconnection is required.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFL91894-04</td>
<td>LL-400b</td>
</tr>
<tr>
<td>N-AFL91710-06</td>
<td>LL-2400 Single Fusion Splice Tray.</td>
</tr>
</tbody>
</table>

Additional accessories and options available.

LightLink 400s
Optical Splicing and Distribution Enclosure

Features
The LightLink (LL) 400s Optical Splicing and Distribution Enclosure provides for organizing, splicing, and interconnecting fibers in FTTx, broadband, distribution and building entrance applications. Each LL-400s enclosure features a scratch resistant powder coated aluminum base and a fully gasketed cover. A unique self-sizing grommet design allows for express and preterminated cable installation. The LL-400s is a butt-style enclosure equipped with four independent cable entry/exit grommets, used for outdoor pedestal or indoor building entrance and riser splicing applications. The unit supports a maximum storage and splicing capacity of up to 72 single or 288 mass-fused fibers.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLM000639</td>
<td>LL-400s</td>
</tr>
<tr>
<td>N-AFL911437-02-02</td>
<td>LL-4848 Mass Fusion Splice Tray.</td>
</tr>
<tr>
<td>N-AFL91710-06</td>
<td>LL-2400 Single Fusion Splice Tray.</td>
</tr>
</tbody>
</table>

Additional accessories and options available.
LightLink 400sx
Optical Splicing and Distribution Enclosure

**Features**
The LightLink (LL) 400sx Optical Splicing and Distribution Enclosure provides for organizing, splicing, and interconnecting fibers in FTTx, broadband, distribution and building entrance applications. Each LL-400sx enclosure features a scratch resistant powder coated aluminum base and a fully gasketed cover. A unique self-sizing grommet design allows for express and preterminated cable installation. The LL-400sx is a butt style enclosure equipped with four independent cable entry/exit grommets, used for outdoor pedestal or indoor building entrance and riser splicing applications. The unit supports a maximum storage and splicing capacity of up to 192 single or 576 mass-fused fibers. The LL-400sx can also mount up to two LGX118® adapter plates. (Splicing capacity is limited to 144 single fusion and 432 mass fusion splices when adapter plates are installed).

<table>
<thead>
<tr>
<th>Part #</th>
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<tbody>
<tr>
<td>N-AFLEA000370</td>
<td>LL-400sx</td>
</tr>
<tr>
<td>N-AFL911457-00-02</td>
<td>LL-4848 Mass Fusion Splice Tray.</td>
</tr>
<tr>
<td>N-AFL91710-06</td>
<td>LL-2400 Single Fusion Splice Tray.</td>
</tr>
</tbody>
</table>

Additional accessories and options available.

LightLink 500 Optical Splicing and Distribution Enclosure

**Features**
The LightLink (LL) 500 Optical Splicing and Distribution Enclosure provides for organizing, splicing and interconnecting fibers in broadband, distribution and building entrance applications. The enclosure features a scratch and corrosion resistant powder paint coating base and a fully gasketed hinged cover. A unique self-sizing grommet design allows for express and preterminated cable installation. The LL-500 supports up to five LL-2450 splice trays for up to 60 single fusion splices or three LL-4850 splice trays (not included in base unit) and an optional 12 fiber, hinged Interconnect Module.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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<tbody>
<tr>
<td>N-AFLFM000326</td>
<td>LL-500-U-O.</td>
</tr>
<tr>
<td>N-AFL91957-00</td>
<td>LL-2450 Single Fusion Splice Tray (stores 12 single fusion splices).</td>
</tr>
<tr>
<td>N-AFL91958-00</td>
<td>LL-4850 Mass Fusion Splice Tray (stores 8 mass fusion sleeves – 96 fibers).</td>
</tr>
</tbody>
</table>

GatorPatch

**Features**
- Fast, Easy Installation – minimizes installation costs
- Pre-terminated and tested eliminates on site termination and testing
- Rugged Construction mounts almost anywhere
- Durable and Secure

<table>
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<tr>
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</tbody>
</table>
LightLink 580 Optical Splicing and Distribution Enclosure

Features
The LightLink (LL) 580 Optical Splicing and Distribution Enclosure provides for organizing, splicing and interconnecting fibers in broadband, distribution and building entrance applications. The splice tray panel is equipped with LGX® 118 footprint snaps so various types of connectors may be installed. The enclosure features a scratch resistant powder coated base and a fully gasketed hinged cover. The cover can be installed on either side of the enclosure where there are space restrictions. The internal interconnect tray and back-plate may be removed from the enclosure and brought to a splicing table to complete splicing, fiber routing and fiber management. The cable entry base has four interchangeable configurations to allow the installation of cable through a grommet system, or through pre-installed conduit couplings.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFL911309-00-05</td>
<td>Optical entrance closure with up to 576 single fusion or 1728 mass fused splice capacity.</td>
</tr>
<tr>
<td>N-AFL911275-00-05</td>
<td>Optical entrance closure with up to 720 single fusion or 4320 mass fused splice capacity.</td>
</tr>
</tbody>
</table>

LightLink Optical Entrance Enclosures

Features
These optical entrance enclosures are designed to provide a convenient splicing and interconnection location for outside plant cabling entering a central office, controlled environmental vault, or customer location. Each unit is designed to allow the entrance and management of up to 60 cables for splicing and interconnecting. Cables from termination locations and the outside plant are easily installed and managed. The splice tray and fiber management designs allow easy access to individual fiber splices and fiber bundles. Each enclosure includes six-port and five-port cable shingles, sealing and retention kits, cable bonding kits, wall mount hardware, and an OEE locking key.

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<th>Description</th>
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<tr>
<td>N-AFL911309-00-05</td>
<td>Optical entrance closure with up to 576 single fusion or 1728 mass fused splice capacity.</td>
</tr>
<tr>
<td>N-AFL911275-00-05</td>
<td>Optical entrance closure with up to 720 single fusion or 4320 mass fused splice capacity.</td>
</tr>
</tbody>
</table>

Wall Mount Interconnect Enclosures (WME)

Features
• Fits comfortably into interconnect, cross connect, and colocation environments.
• U-shaped cable entry eliminates the need to feed preconnectorized cables through an inconvenient access port.
• Modular design fully compatible with PoliMOD™ products and XFM optical cassettes.
• Dual doors with separate locking options for flexibility and security.
• Available empty, with adapters, or with adapters, splice trays and pigtails pre-installed.
• Available with two or four LGX(R) mounting positions.
• Optional splice tray and holder (ordered separately).
• All major connector types are supported.

<table>
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<tr>
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</tr>
</tbody>
</table>
LightLink 3008 8/ONT Cabinet

Features

The LightLink (LL) 3008 8/ONT cabinet is used to provide secure and convenient location for up to eight optical network terminals (ONTs). The cabinet can house four ONTs in the back and an additional four ONTs with optional door mounting kit. The optional skirt houses up to four battery back-up units. The cabinet is a NEMA 3 rated enclosure and constructed with weathertight gaskets and free breathing components for indoor/outdoor pad or wall mounted applications. Inner mounting plates allow for components to be mounted without the penetrating the exterior of the cabinet. A removable plate in the bottom of the cabinet allows for multiple conduit connections and uses LightLink grommets for passing OSP drop cables. Designed to allow for maximum heat dissipation, the LL-3008 keeps its cool in the most extreme environments.

- Durable and scratch resistant.
- Door opening can be on the right or left side with no additional parts.
- Back and bottom panels available in skirt for various mounting options.
- Bottom plate with knock-outs and two U-shaped cable entries with grommets.
- Pad or wall mounted.
- Indoor or outdoor installation.
- Prop rod with door opening.
- Cost effective.

<table>
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</table>

FPB-201 Fiber Demarcation Box

Features

The FPB-201 is injection molded with an integral fiber retention system allowing for quick installation and a positive lock strain relief for most premise fiber cable. This device allows for the indoor and protected outdoors interconnect of up to two standard SC adapters in a protected plastic enclosure to blend in most environments.

<table>
<thead>
<tr>
<th>Part #</th>
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</thead>
<tbody>
<tr>
<td>N-AFLDM000108</td>
<td>Injection molded fiber demarcation box for up to (2) fibers.</td>
</tr>
</tbody>
</table>
OptiNID® 300 Series Optical Demarcation Slack Storage Closure

Features
The OptiNID OPN-300 series are optical demarcation closures designed for use in either indoor or outdoor environments. Smaller to suit FTTH demarcation applications and versatile to suit CATS or coax connections, the OPN-327SS and the OPN-350SS are equipped to handle up to two adapters each. Configured with routing rings positioned to accommodate safe slack storage, the OPN-300 series closures can be either wall or pole mounted for ease of use and accessibility.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLDM000720</td>
<td>OPN-327SS slack storage box 3/4&quot; NPT, plug, heyco, 1 x SC/APC adapter.</td>
</tr>
<tr>
<td>N-AFLDM000795</td>
<td>OPN-350SS slack storage box 3/4&quot; NPT, plug, heyco, 1 x SC/APC adapter, ground stud.</td>
</tr>
</tbody>
</table>

OptiNID® 500 Optical Demarcation Closure

Features
The OptiNID OPN-500 is an optical demarcation closure designed for use in either indoor or outdoor environments. Small form factor for FTTH demarcation applications, the closure is capable of housing up to six bulkhead adapters in one 118 LGX® compatible adapter plate, and is equipped with an integrated splice tray, which holds up to six single fusion splices. The OPN-500 can be either wall or pole-mounted.

<table>
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</thead>
<tbody>
<tr>
<td>N-AFLDM000720</td>
<td>OPN-327SS slack storage box 3/4&quot; NPT, plug, heyco, 1 x SC/APC adapter.</td>
</tr>
<tr>
<td>N-AFLDM000795</td>
<td>OPN-350SS slack storage box 3/4&quot; NPT, plug, heyco, 1 x SC/APC adapter, ground stud.</td>
</tr>
</tbody>
</table>

OptiNID® OPN-760XL Optical Demarcation Enclosure

Features
The OptiNID OPN-760XL is an optical demarcation closure designed for use in either indoor or outdoor environments. It is capable of housing up to 24 bulkhead adapters in two 118 LGX® compatible adapter plates and is equipped with a splice tray that holds up to 24 single fusion splices. The OPN-760XL can be either wall or pole-mounted.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLDM001000</td>
<td>OptiNID OPN-760XL, no adapters, no security cover.</td>
</tr>
<tr>
<td>N-AFLDM001022</td>
<td>OptiNID OPN-760XL, no adapters, security cover.</td>
</tr>
</tbody>
</table>

OptiNID® 1224 Optical Demarcation Enclosure

Features
The OptiNID-1224 is an optical demarcation closure designed for use in either indoor or outdoor environments. It is capable of housing up to 24 bulkhead adapters in two 118 LGX® compatible adapter plates and comes equipped with a splice tray that holds up to 24 single fusion splices. The OPN-1224 can be either wall or pole-mounted.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLDM001000</td>
<td>OptiNID OPN-760XL, no adapters, no security cover.</td>
</tr>
<tr>
<td>N-AFLDM001022</td>
<td>OptiNID OPN-760XL, no adapters, security cover.</td>
</tr>
</tbody>
</table>

Additional accessories and options available contact for additional options or information.
OSP Closures

**IDEAA Sealed Splice Closure**

**Features**
The IDEAA SCS is designed to mount either in buried or aerial applications. The splice closure comes equipped to install one (1) IDEAA module along with a tray to splice all input and output fiber cables. The splice closure is designed to handle multiple fiber cables.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>N-AFLEA000076</td>
<td>IDEAA Splice Closure</td>
</tr>
<tr>
<td>N-AFLEA000168</td>
<td>IDEAA Splice Closure Pigtail Kit.</td>
</tr>
</tbody>
</table>

**LightGuard 55 Sealed Fiber Optic Splice Closure**

**Features**
Designed with versatility in mind, the LightGuard (LG) 55 sealed closure offers a variety of solutions including repair and distribution splicing, grounding for fiber-in-the-loop applications, and for use as an isolation gap with armored cables. This closure accepts stranded loose tube, Uniflex® or ribbon fiber cables in either armored or dielectric configurations and can be utilized in a butt or in-line configuration. The LG-55 closure incorporates a unique cable clamp design sealing the cable, allowing both of the cover halves to be removed without disturbing the contents. In addition, AFL's Peel and Seal Grommet System™ is incorporated to ensure a tight fit on various cable diameters, fully sealing the closure and protecting the fiber while eliminating cumbersome tape and washers – making installation fast and easy.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLFC000034-PS</td>
<td>LG-55 Sealed Fiber Optic Splice Closure – 24 fusion splice capable and includes (2) cable kits for sealing/retention, (2) cable grounding kits, (1) dual cable entry port kit and a grounding terminal. Splice tray not included.</td>
</tr>
<tr>
<td>N-AFLFC000247</td>
<td>LG-55 Splice Tray – Stores 24 single fusion splices and includes base, cover, (3) eight-position splice holders and tie wraps. Maximum of (1) tray in the LG-55.</td>
</tr>
</tbody>
</table>

Additional accessories and options available.

**LightGuard 55-SC Sealed Fiber Optic Splice Closure**

**Features**
The LightGuard (LG) 55-SC sealed closure retains all the features of the LG-55, but includes a unique patching system that utilizes preterminated SC fiber assemblies or field installable connectors such as the FastConnect® SC.

An innovative solution that can be used to facilitate a link between traffic control cabinets and entrance cables, the LG-55-SC closure allows for rapid restoration and minimal damage to a fiber optic cable should an impact disable the cabinet. A breakable tie wrap secures the preconnectorized cable to one side of the closure (traffic control cabinet), while the main entrance cable is secured with a more rugged cable clamp, allowing the system to separate during a damaging impact.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLFC000481-PS</td>
<td>LG-55-SC Sealed Fiber Optic Splice Closure.</td>
</tr>
</tbody>
</table>

Additional accessories and options available.
LightGuard 150, 250, and 350
Sealed Fiber Optic Splice Closure

Features
The LightGuard (LG) 150 is a sealed dome closure designed for small count fiber splicing in a butt configuration. Utilized in aerial or underground environments where a sealed closure is required, these are ideal for express or ring applications and requires only a common can wrench for installation.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>N-AFLFC000001-PS</td>
<td>LG-150 Sealed Fiber Optic Splice Closure – 48 single or 192 mass fusion capable, includes (5) cable kits for sealing/retention and a grounding terminal.</td>
</tr>
<tr>
<td>N-AFL91957-00</td>
<td>LL-2450 Splice Tray – Stores 12 single fusion splices, includes base, cover, (2) six-position single splice holders and tie wraps. Maximum of (4) splice trays in the LG-150.</td>
</tr>
<tr>
<td>N-AFLFC000592</td>
<td>Pole or Wall Mount Bracket – For use with LG-150/250/350.</td>
</tr>
<tr>
<td>N-AFLFC000002-PS</td>
<td>LG-250 Sealed Fiber Optic Splice Closure – 96 single or 288 mass fusion capable, includes (5) cable kits for sealing/retention and a grounding terminal.</td>
</tr>
<tr>
<td>N-AFL91710-06</td>
<td>LL-2400 Splice Tray – Stores 24 single fusion splices, includes base, cover, (1) 24-position single splice holder and tie wraps. Maximum of (4) trays in the LG-250.</td>
</tr>
<tr>
<td>N-AFL91711-07</td>
<td>LL-4800 Splice Tray – Stores (4) mass fusion splices, includes base, cover, (1) four-position ribbon splice holder and tie wraps. Maximum of (10) trays in the LG-300XL.</td>
</tr>
<tr>
<td>N-AFL91710-06</td>
<td>LL-2400 Splice Tray – Stores 24 single fusion splices, includes base, cover, (1) 24-position single splice holder and tie wraps. Maximum of (12) trays in the LG-350.</td>
</tr>
<tr>
<td>N-AFL911437-00-02</td>
<td>LL-4848 Splice Tray – Stores 12 mass fusion splices, includes base, cover, (1) 12-position ribbon splice holder and tie wraps. Maximum of (6) trays in the LG-350.</td>
</tr>
</tbody>
</table>

Additional accessories and options available.

LightLink 24 Slim-Line Pedestal

Features
The LightLink (LL) 24 Pedestal provides a low cost solution for splicing underground fiber cable, branches and drops. The pedestal may be buried up to the burying guide lines located on the pedestal base. It is designed to allow for splicing single fusion fibers from 24 to 144 splices with use of LL-2448 or 288 MF by adding additional splice trays as required to meet maximum splice capacity. One side of the pedestal may be used for splicing optical fibers while the opposite side may be used for copper splicing of branch or drop cables.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLFE000086</td>
<td>LL-24 Pedestal.</td>
</tr>
<tr>
<td>N-AFLFA000045</td>
<td>LL-2448-48S Single Fused Fiber Optic Splice Tray (48 sf).</td>
</tr>
</tbody>
</table>

Additional accessories and options available.
LightGuard 350-AC Drop Access
Sealed Fiber Optic Splice Closure

Features
The LightGuard (LG) 350-AC sealed dome closure is intended for utilization in aerial or underground environments where a sealed closure is required and space may be limited. Designed for drop access applications providing access for up to 12 drops, this closure is also versatile enough to be used for splicing up to 144 single splices in a butt configuration. Ideal for fiber-to-the-home installations in small hand-hole applications, the LG-350-AC requires only a common can wrench for installation.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLFC000412</td>
<td>LG-350-AC Dome Closure, 144 single fusion capable (with additional trays), (5) cable entry kits for sealing and retention (1) single port for express and (3) quad port for drop), ground terminal, (1) LL-4808L splice tray.</td>
</tr>
<tr>
<td>N-AFLFA000021</td>
<td>Single Fusion Splice Tray – Stores up to 36 single fused fibers. Maximum of (4) trays in LG-350-AC.</td>
</tr>
<tr>
<td>N-AFLFA000020</td>
<td>Mass Fusion Splice Tray – Stores up to 144 mass fused fibers. Maximum of (4) trays in LG-350-AC.</td>
</tr>
<tr>
<td>N-AFLFC000592</td>
<td>Pole or Wall Mount Bracket – For use with LG-150/250/350.</td>
</tr>
</tbody>
</table>

Additional accessories and options available.

LightGuard 350XL
Sealed Fiber Optic Splice Closure

Features
The LightGuard (LG) 350XL is a sealed dome closure designed for large count fiber splicing (up to 864 single or 2592 mass) in a butt configuration. Utilized in aerial or underground environments where a sealed closure is required, the LG-350XL requires only a common can wrench for installation.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLFC000010-PS</td>
<td>LG-350XL Sealed Fiber Optic Splice Closure – 864 single fusion or 2592 mass fusion capable, includes (5) cable kits for sealing / retention (single and dual cable configurations) and a grounding terminal.</td>
</tr>
<tr>
<td>N-AFL191676-00-02</td>
<td>LL-4896 Splice Tray – Stores 96 single fusion splices or (24) 288 mass fusion splices, includes base, cover, (16) six-position single splice holders, (6) four-position ribbon splice holders and tie wraps. Maximum of (9) trays in the LG-350XL.</td>
</tr>
<tr>
<td>N-AFL191710-06</td>
<td>LL-2400 Splice Tray – Stores 24 single fusion splices, includes base, cover, (1) 24-position single splice holder and tie wraps. Maximum of (4) trays in the LG-350XL.</td>
</tr>
<tr>
<td>N-AFL12215-00-00</td>
<td>Strand Mount Hanger Bracket – For use with LG-300XL.</td>
</tr>
</tbody>
</table>

LightGuard1642XL Aerial Closure

Features
The LightGuard (LG) 1642XL Aerial Closure is a cost-effective and easy-to-use solution for splicing fibers in a variety of outside plant applications. The LG-1642XL comes equipped with a splice tray accommodating up to 24 single splices, and can be either pole or strand mounted. The LG-1642XL features two grommeted areas. The upper grommets allow cable to be routed through the unit. The lower grommets allow drops to be routed out of the enclosure. The two stainless steel rings attached to bottom of closure are used to secure drip loops for the drops. Also includes eight single-connector capacity plate with easy locking removal mechanism, allowing access to the splice tray when needed.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLFC000748</td>
<td>LG-1642XL Aerial Closure.</td>
</tr>
</tbody>
</table>
LightGuard 420 Aerial Weathertight Fiber Optic Splice Closure

Features
The LightGuard (LG) 420 aerial weathertight fiber optic splice closure is designed to allow for taut sheath (no slack) splicing in aerial applications such as repairing cable sheath and fibers or providing mid-span access. Requires only a common can wrench for installation.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLFC000023</td>
<td>LG-420 Aerial Weathertight Universal Fiber Optic Splice Closure which includes: (2) six-fiber single fusion splice organizers, (2) grounding terminals and (4) individual self sealing ports. Expandable to (8) cable ports.</td>
</tr>
</tbody>
</table>

Additional accessories and options available.

LightGuard 420 FTTx Aerial Weathertight Fiber Optic Splice Closure

Features
The LightGuard (LG) 420 FTTx aerial weathertight fiber optic splice closure is designed to allow for taut sheath (no slack) splicing in aerial applications such as FTTx access networks. The LG-420 FTTx provides access for 1 to 16 subscriber drops and requires only a common can wrench for installation.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLFC00099</td>
<td>LG-420-FTTx Aerial Weathertight Fiber Optic Splice Closure includes: splice tray to accommodate up to 32 single fusion splices, (2) blank adapter bulkheads (SC style), (2) grounding terminals and (4) individual self-sealing ports.</td>
</tr>
</tbody>
</table>

Additional accessories and options available.
LightGuard 500 Aerial Weathertight Fiber Optic Splice Closure

Features
The LightGuard (LG) 500 Aerial Weathertight Fiber Optic Splice Closure is designed for small to medium count fiber splicing (up to 96 single, 288 using LL-2448-48S splice tray, or 288 mass) in aerial applications. Compact in design for congested aerial construction and requires only a common can wrench for installation.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLFC000026</td>
<td>Aerial Weathertight Universal Compact Splice Closure includes: (4) cable retention kits, (2) grounding terminals, (4) self sealing ports and standard aerial hangars.</td>
</tr>
<tr>
<td>N-AFL91710-06</td>
<td>Single Fusion Splice Tray – Stores 24 single fused fibers. Maximum of (3) trays in LG-500.</td>
</tr>
<tr>
<td>N-AFL911437-00-02</td>
<td>Mass Fusion Splice Tray – Stores 12 mass fusion sleeves, 144 fibers. Maximum of (2) trays in LG-500.</td>
</tr>
</tbody>
</table>

Additional accessories and options available.

LightGuard 500 FTTx Aerial Weathertight Fiber Optic Splice Closures

Features
The LightGuard (LG) 500 FTTx Aerial Weathertight Fiber Optic Splice Closure is designed to allow for fiber splicing in aerial applications such as FTTx access networks. The LG-500 FTTx provides cable entry and connectivity for one to 12 subscriber drops.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLFC000899</td>
<td>LG-500 FTTx Aerial Weathertight Fiber Optic Splice Closure includes splice tray accommodating up to (32) single fusion splices, (2) blank SC-style adapter bulkheads, (2) grounding terminals, and (4) individual self-sealing ports.</td>
</tr>
</tbody>
</table>

Additional accessories and options available.

LightGuard 600 Aerial Weathertight Fiber Optic Splice Closure

Features
The LightGuard (LG) 600 Aerial Weathertight Fiber Optic Splice Closure is designed for high count fiber splicing (up to 288 single or 1152 mass) in aerial applications where a cost-effective high cable entry closure is desired. It requires only a common can wrench for installation.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLFC000899</td>
<td>LG-600 FTTx Aerial Weathertight Fiber Optic Splice Closure includes splice tray accommodating up to 32 single fusion splices, (2) blank SC-style adapter bulkheads, (2) grounding terminals and (4) individual self-sealing ports.</td>
</tr>
</tbody>
</table>

Additional accessories and options available.
LightGuard 600 FTTx/32 Aerial Weathertight Fiber Optic Splice Closure

Features
The LG-600-FTTx/32 Aerial Fiber Optic Closure is designed to accommodate up to 32 SC connections utilizing AFL’s slim LGX-118 adapter style plates with 16 adapters at each end of the inner security enclosure. Additionally, this closure allows for installing combinations of 1x4, 1x8, 1x16, or 1x32 PLC splitters.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLFC000029</td>
<td>LG-600-FTTx/32 Aerial Weathertight Universal High Capacity Splice Closure includes: (4) cable retention kits, (2) grounding terminals, (6) self sealing ports, and standard length aerial hangars.</td>
</tr>
<tr>
<td>N-AFL911437-00-02</td>
<td>Mass Fusion Splice Tray – Stores 12 Mass fusion sleeves /144 fibers. Maximum of (6) trays in LG-300.</td>
</tr>
<tr>
<td>N-AFLFC000806</td>
<td>Aerial Weathertight Splice Closure accommodates splicing and connectivity which includes: (6) cable retention kits, (2) grounding terminals, (6) self sealing ports and adjustable aerial hangars, (1) LL2448 Splice Tray, and (2) sets of slim adapter plates.</td>
</tr>
</tbody>
</table>

Additional accessories and options available.

LightLink™ Fiber Optic Splice Trays

Features
LightLink Fiber Optic Splice Trays offer a variety of unique and flexible splice and storage possibilities. They are available in industry standard configurations (single, mass).

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFL911289-00-02</td>
<td>Single or Mass Fusion Splice Tray – Stores 24 single or (4) mass fusion splices – Tray also allows for ribbon break out for single fusion splices.</td>
</tr>
</tbody>
</table>

Additional accessories and options available.

LightLink™ Splitter Trays

Features
The LightLink Splitter Trays are a packaged system that include factory-installed PLC splitters and splicing trays that easily fit within AFL’s LG Series closures, LL Series wall mount cabinets and pedestals. These splitter trays feature 1x4, 1x8, 1x16 or 1x32 planar technology with optical characteristics that include low insertion loss, high uniformity, and excellent environmental stability. The products are Telcordia® GR-1209 and GR-1221-CORE compliant ensuring longevity and durability in an outside plant application. The splitter couplers are factory-installed and secured within the tamper-proof splice trays. With the lengthy transition tubing pre-installed, the device fibers are routed into the included splice trays to help complete installations in a timely manner. No additional trays are required, reducing material costs.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLFC000571</td>
<td>LightLink Splitter Tray PKG 1x4.</td>
</tr>
<tr>
<td>N-AFLFC000539</td>
<td>LightLink Splitter Tray PKG 1x8.</td>
</tr>
<tr>
<td>N-AFLFC000538</td>
<td>LightLink Splitter Tray PKG 1x16.</td>
</tr>
<tr>
<td>N-AFLFC000537</td>
<td>LightLink Splitter Tray PKG 1x32.</td>
</tr>
</tbody>
</table>

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Slack Storage

Drop Cable Storage Unit (DCSU) for Fiber Optic Cable Drops

**Features**
The DCSU Fiber Storage Unit is designed to store and organize the slack from a fiber drop that is left at a fiber distribution terminal. It can also be used for the organization or safe storage of unused multibiber drop in the placing of a multiport terminal from VATS splices. The DCSU can manage up to 12 fiber drops when laid flat into the raceway, with minimal slack required at the terminal. All hardware required for aerial strand mounting is included. Strand mount support brackets meet Telcordia® specifications. Galvanized strand clamping devices accommodate 1/4” to 7/16” strand and meet ASTM specifications A153 and B695. DCSUs are constructed from aluminum with a baked acrylic enamel finish.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLA000047</td>
<td>FOSP-DROP kit (pair)</td>
</tr>
<tr>
<td>N-AFLA000067</td>
<td>DCSU wall / pole mount bracket</td>
</tr>
</tbody>
</table>

Fiber Storage Units

**Features**
AFL Fiber Storage Units (FSU) are used to conveniently and safely store an extra length of cable along the support strand for later use. The FSU kit contains fiber storage units, two sets of hanger brackets, and all of the basic hardware for attachment to the support strand. The units are constructed from either aluminum with a baked acrylic enamel finish or dielectric polypropylene with a UV inhibitor. Strand mount support brackets meet Telcordia® specifications. Galvanized strand clamping devices accommodate 1/4” to 7/16” strand and meet ASTM specifications A153 and B695.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFL911107-00</td>
<td>FSU-10</td>
</tr>
<tr>
<td>N-AFL911108-00</td>
<td>FSU-12</td>
</tr>
<tr>
<td>N-AFL911109-00</td>
<td>FSU-16</td>
</tr>
<tr>
<td>N-AFL911110-00</td>
<td>FSU-18</td>
</tr>
<tr>
<td>N-AFL911944-00-00</td>
<td>FSU-20</td>
</tr>
<tr>
<td>N-AFLA000095</td>
<td>FSU-24</td>
</tr>
<tr>
<td>N-AFLA000004</td>
<td>FOSP-12-TMK</td>
</tr>
<tr>
<td>N-AFLA000002</td>
<td>FOSP-17-TMK</td>
</tr>
</tbody>
</table>

Fiber Storage Units for ADSS Cable

**Features**
AFL Fiber Storage Units (FSU) are used to conveniently store an extra length of cable along the ADSS cable run for later use. The FSU kit contains two UV-stabilized PPE thermoplastic fiber storage units, two sets of hanger brackets, and all of the basic hardware for attachment to the ADSS cable. ADSS cable mount support brackets meet Telcordia® specifications. Epoxy coated clamping devices meet ASTM specifications A153 and B695. The “TP” mounting bracket features an angled, tent-profile, epoxy-coated bracket for standard ADSS cable mounting.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-AFLA000049</td>
<td>FOSP ADSS kit FOSP-12-ADSS-TP</td>
</tr>
<tr>
<td>N-AFLA000050</td>
<td>FOSP ADSS kit FOSP-17-ADSS-TP</td>
</tr>
</tbody>
</table>
**FOCIS Flex Fiber Optic Connector Inspection System**

**Features**
- Auto-focus and auto-centering for fast, easy inspection.
- Untethered operation simplifies access at patch panels.
- Pass/fail analysis using IEC 61300-3-35 or user-defined criteria.
- Self-contained, compact, handheld inspection solution.
- Use independently, or Bluetooth pair with FlexTester OTDR.
- Save results internally and upload via Bluetooth or USB.
- Ergonomic design fits in the palm of your hand.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN-FOCIS-FLX-PAXN</td>
<td>FOCIS Flex Kit, soft carry case / holster, USB cable, AC charger, reference guide, no tips.</td>
</tr>
<tr>
<td>YN-FOCIS-FLX-PAXU</td>
<td>FAXU FOCIS Flex Kit, soft carry case / holster, USB cable, AC charger, reference guide, (2) user-selected UPC adapter tips (female and bulkhead), user-selected One-Click cleaner.</td>
</tr>
<tr>
<td>YN-FOCIS-FLX-PAXA</td>
<td>FOCIS Flex Kit, soft carry case / holster, USB cable, AC charger, reference guide, (2) user-selected APC adapter tips (female and bulkhead), user-selected One-Click cleaner.</td>
</tr>
</tbody>
</table>

**VS300 View Safe Video Microscope**

**Features**
- Safe: No optical path to the user’s eye.
- Ergonomic: Comfortable molded easy grip case.
- 2.5 mm universal adapter included (accepts FC, ST, FC, MPO/MTP, etc.).
- 400x image size.
- NTSC video output.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-Y-300VS</td>
<td>VS300 Inspection Scope. Includes 2.5 mm universal adapter, neck strap and carrying case.</td>
</tr>
</tbody>
</table>

**DFS1 Digital FiberScope**

**Features**
- Single-handed operation.
- 400x magnification.
- Video output via USB port to M210, M200, M700, C840, C850, C860, C880 or user PC.
- Powered from USB; no batteries required.
- Fast, easy focus and display capture.
- Extensive assortment of interchangeable fiber connector and bulkhead adapter tips.
- Adapter tips easily changed; no tools required.
- Use SimpleView PC software to inspect connectors using a laptop PC.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN-DFS1-00-04XU</td>
<td>DFS1 Digital FiberScope PC/UPC Inspection Kit includes: (1) USB Digital FiberScope, (1) Universal 1.25 mm male PC adapter tip, (1) Universal 2.5 mm male PC adapter tip, (1) SC and FC female bulkhead adapter tip, (1) LC female bulkhead adapter tip, (1) soft carry case for scope and adapters, (1) One-Click Cleaner SC, ST, FC, (1) One-Click Cleaner LCMU, (1) 6-compartment adapter tip storage box, (1) software update for M200, M210, M700, C840, C850, C860, C880.</td>
</tr>
<tr>
<td>YN-DFS1-00-04XA</td>
<td>DFS1 Digital FiberScope APC Inspection Kit includes: (1) USB Digital FiberScope, (1) Universal 2.5 mm male APC adapter tip, (1) SC/APC and FC/APC bulkhead adapter tip, (1) SC/APC bulkhead adapter tip, (1) soft carry case for scope and adapters, (1) One-Click Cleaner SC, ST, FC, (1) 6-compartment adapter tip storage box, (1) software update for M200, M210, M700, C840, C850, C860, C880.</td>
</tr>
<tr>
<td>YN-DFS1-00-04XN</td>
<td>DFS1 USB Digital Fiber Inspection Kit without Adapters includes: (1) USB Digital FiberScope, (1) Soft carry case for scope and adapters, (1) 6-compartment adapter tip box, (1) software update for M200, M210, M700, C840, C850, C860, C880.</td>
</tr>
</tbody>
</table>
**FOCIS WiFi2 Fiber Optic Connector Inspection System**

**Features**
- App based automatic and manual focus: auto-centering after image capture
- Multicolor, screen-less LED pass/fail indicator
- Viewing and full reporting capabilities on mobile devices
- 8+ hours operation with rechargeable Li-ion batteries

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YE-FOCIS-WIF2-N</td>
<td>FOCIS WiFi2 Kit, soft carry case, AC charger, with NO tips or One-Click cleaner</td>
</tr>
<tr>
<td>YE-FOCIS-WIF2-U</td>
<td>FOCIS WiFi2 Kit, soft carry case, AC charger, user-selected: (2) UPC ferrule and bulkhead adapter tips and (1) One-Click cleaner</td>
</tr>
<tr>
<td>YE-FOCIS-WIF2-A</td>
<td>FOCIS WiFi2 Kit, FOCIS WiFi2, soft carry case, AC charger, user-selected: (2) APC ferrule and bulkhead adapter tips and (1) One-Click cleaner</td>
</tr>
<tr>
<td>YE-FOCIS-WIF2-UA</td>
<td>FOCIS WiFi2 Kit, soft carry case, AC charger, user-selected: (2) UPC and (2) APC ferrule and bulkhead adapter tips and (1) One-Click cleaner</td>
</tr>
</tbody>
</table>

**FIP-400B Fiber Inspection Scope Series**

**Features**
- Fully automated, one-step process:
  - Automatic fiber-connection detection
  - Automatic image centering, focus adjustment and optimization
  - Automatic Automatic capture
  - Automatic pass/fail analysis, and reporting

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YE-FIP-4XX</td>
<td>Fiber Inspection Probe.</td>
</tr>
</tbody>
</table>

**X1= Inspection Probe Model**
- FIP-410B = Digital video inspection probe triple magnification.
- FIP-420B = Analysis digital video inspection probe automated pass/fail analysis triple magnification auto-centering.
- FIP-430B = Automated analysis digital video inspection probe automated focus automated pass/fail analysis triple magnification auto-centering.

**FIP-435B Wireless Fiber Inspection Scope**

**Features**
- 100% Automated, one-step inspection process
- Completely wireless, self-powered unit
- Screen-less LED pass/fail indicator
- Full reporting capabilities on mobile devices

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YE-FIP-435</td>
<td>Fiber Inspection Probe.</td>
</tr>
</tbody>
</table>

## Fusion Splicing – Core Alignment

### 70S Fusion Splicer

**Features**
- Automated and programmable wind protector.
- 14-second automated tube heater.
- Fully ruggedized for shock, dust and moisture.
- Li-ion battery with 200 splices/shrinks per charge.
- 5 mm cleave length for splice on connector or small package needs.
- Sheath clamp or fiber holder operation.
- On-board training and support videos.

### Fujikura 62S Fusion Splicer

**Features**
- 5,000 splices electrode life
- 23 second tube heating time with standard sleeves
- Fully ruggedized for shock, dust and moisture
- Li-ion battery with 200 splices/shrinks per charge
- 5 mm cleave length for splice on connector or small package needs
- Sheath clamp or fiber holder operation

### Part # Description

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-AFLS015580</td>
<td>70S Fusion Splicer (machine only) that includes: ADC-18 AC adapter, ACC-14 AC cord, ELCT2-20A spare electrodes (pair), S70C sheath clamp, USB cable, alcohol pot, screw driver, splicer carrying strap, quick reference guide, video instruction manual and CC30 transit case with carrying strap.</td>
</tr>
<tr>
<td>S-AFLS015590</td>
<td>70S Fusion Splicer Kit (with cleaver) that includes: All items found in S-AFLS015580 and CT30A cleaver.</td>
</tr>
<tr>
<td>S-AFLS015591</td>
<td>70S Fusion Splicer Kit (with cleaver, battery and cord) that includes: S-AFLS015580, BTR-09 battery, DCC-18 battery charge cord and CT30A cleaver.</td>
</tr>
<tr>
<td>S-AFLS016283</td>
<td>62S Fusion Splicer Kit (with CT-06A cleaver, battery and cord) Includes: All the items found in S016297 plus a BTR-09 Battery, DCC-18 Battery Charge Cord, CT-06A Cleaver.</td>
</tr>
<tr>
<td>S-AFLS016281</td>
<td>62S Fusion Splicer Kit (with CT-30A cleaver, battery and cord) Includes: All the items found in S016297 plus a BTR-09 Battery, DCC-18 Battery Charge Cord, CT-30A Cleaver.</td>
</tr>
</tbody>
</table>

## Fusion Splicing – Clad Alignment

### 12S Fusion Splicer

**Features**
- World’s smallest splicer at 4.76" W x 6.38" D x 2.24" H.
- Fully ruggedized for shock, moisture and dust resistance.
- Transit case converts to easy to use workstation.
- Dual camera, fixed V-groove alignment technology.
- Extended life electrodes.
- Long life battery (100 splices/shrinks per charge).

### Part # Description

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-AFLS015521</td>
<td>Fujikura 12S Fusion Splicer machine only: Fujikura 12S Fusion Splicer, ADC-19 AC adapter, BTR-10 battery pack (installed), FH-60-250 fiber holders (pair), FH-60-903 fiber holder, ACC-09 power cord, ELCT2-22 spare electrodes (pair), operation manual on CD, quick reference guide, AP-01 alcohol container, SD01 screwdriver and CC-29 transit case.</td>
</tr>
<tr>
<td>S-AFLS015522</td>
<td>Fujikura 12S Fusion Splicer Kit 1 which includes: S-AFLS015521, Fujikura 12S Fusion Splicer and CT-30 cleaver.</td>
</tr>
<tr>
<td>S-AFLS015530</td>
<td>Fujikura 12S Fusion Splicer Kit 2 which includes: S-AFLS015521, Fujikura 12S Fusion Splicer and CT-06 cleaver.</td>
</tr>
</tbody>
</table>
19S Fusion Splicer

**Features**
- Automated and programmable wind protector.
- Fully ruggedized for shock, dust and moisture.
- Li-ion battery with 180 splice/heat cycles per charge.
- 5 mm cleave length for splice on connector or small package needs.
- Sheath clamp or fiber holder operation.
- Multifunction transit case with integrated workstation.
- On-board training and support videos.
- Internet software upgrades.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-AFLS015679</td>
<td>19S Fusion Splicer (machine only) which includes: ADC-18 AC adapter, ACC-14 AC cord, ELCT2-20A spare electrodes (pair), S70C sheath clamp, USB cable, alcohol pot, screwdriver, splicer carrying strap, quick reference guide, video instruction manual and CC30 transit Case with carrying strap.</td>
</tr>
<tr>
<td>S-AFLS015680</td>
<td>19S Fusion Splicer (with cleaver) which includes: CT30A cleaver, ADC-18 AC adapter, ACC-14 AC cord, ELCT2-20A spare electrodes (pair), S70C sheath clamp, USB cable, alcohol dispenser, screwdriver, splicer carrying strap, quick reference guide, video instruction manual, and CC30 transit case with carrying strap.</td>
</tr>
<tr>
<td>S-AFLS015681</td>
<td>19S Fusion Splicer (with cleaver, battery and cord) which includes: BTR-09 battery, DCC-18 battery charge cord, CT30A cleaver, ADC-18 AC adapter, ACC-14 AC cord, ELCT2-20A spare electrodes (pair), S70C sheath clamp, USB cable, alcohol dispenser, screwdriver, splicer carrying strap, quick reference guide, video instruction manual and CC30 transit case with carrying strap.</td>
</tr>
</tbody>
</table>

22S Fusion Splicer

**Features**
- Dual camera, active cladding alignment technology.
- World's smallest active clad alignment splicer at 4.72”W x 7.44”D x 2.8”H.
- Fully ruggedized for shock, moisture and dust resistance.
- Transit case converts to easy to use workstation.
- Extended life electrodes.
- Long life battery (200 splices/shrinks per charge).
- Auto start tube heater.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-AFLS016111</td>
<td>Fujikura 21S Fusion Splicer which includes: Fujikura 21S Fusion Splicer, S21A sheath clamp, ADC-19 AC adapter, BTR-11 battery pack (installed), ACC-09 power cord, ELCT2-12 spare electrodes (pair), operation manual on CD, quick reference guide, AP-01 alcohol container, SD01 screwdriver and CC-32 transit case.</td>
</tr>
<tr>
<td>S-AFLS016155</td>
<td>Fujikura 21S Fusion Splicer Kit 1 which includes: Fujikura 21S Fusion Splicer, CT-30A cleaver, S21A sheath clamp, ADC-19 AC adapter, BTR-11 battery pack (installed), ACC-09 power cord, ELCT2-12 spare electrodes (pair), operation manual on CD, quick reference guide, AP-01 alcohol container, SD01 screwdriver and CC-32 transit case.</td>
</tr>
<tr>
<td>S-AFLS016154</td>
<td>Fujikura 21S Fusion Splicer Kit 2 which includes: Fujikura 21S Fusion Splicer, CT-08A cleaver, S21A sheath clamp, ADC-19 AC adapter, BTR-11 battery pack (installed), ACC-09 power cord, ELCT2-12 spare electrodes (pair), operation manual on CD, quick reference guide, AP-01 alcohol container, SD01 screwdriver and CC-32 transit case.</td>
</tr>
</tbody>
</table>
Ninja NJ001 Handheld Single/Mass Fiber Clad Alignment Fusion Splicer

Features

- Wider splicing chamber for easier fiber loading.
- High propulsion motor – A powerful motor with a propulsion of 8N helps ensure stable splicing even for highly rigid cables including drop and indoor cables.
- Ruggedized design – The ruggedized body is designed to endure shocks and impact along with exposure to water and dust.
- Compatibility with splice-on connector (SOC) – The detachable heater clamp allows work with SOC.
- 100 cycles (splicing and heating).

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-FFNJ001-X-A-000</td>
<td>Value kit contains:</td>
</tr>
<tr>
<td>FITEL NINJA NJ001</td>
<td>Main body (including battery).</td>
</tr>
<tr>
<td>HCC-03</td>
<td>Hard carrying case.</td>
</tr>
<tr>
<td>ELR-01</td>
<td>Spare electrodes (1pair).</td>
</tr>
<tr>
<td>S978A</td>
<td>AC adapter.</td>
</tr>
<tr>
<td>D5111</td>
<td>AC cable cord.</td>
</tr>
<tr>
<td>VGC-01</td>
<td>Electrode sharpener.</td>
</tr>
<tr>
<td>UMC-01</td>
<td>User manual (CD).</td>
</tr>
<tr>
<td>FTS-347</td>
<td>User manual.</td>
</tr>
</tbody>
</table>

S123V2 Handheld Clad Alignment Fusion Splicer

Features

- Rugged and compact hand held design for demanding environmental conditions.
- Fast splice (13 sec) at low loss and fast heating (25 sec) for single fiber (By using semi-auto mode for splicing and preheating mode for heating).
- Simple operation with fixed V-groove.
- Splicer is compatible with Seikoh Giken and Diamond SOCs.
- 70 cycles for S123C models with a single battery.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-FF S123C-A-V2</td>
<td>Value kit contains:</td>
</tr>
<tr>
<td>S123-C-A-0001-V2</td>
<td>S123C v2 main body</td>
</tr>
<tr>
<td>SCC-01</td>
<td>Soft carrying case.</td>
</tr>
<tr>
<td>S9438</td>
<td>Battery pack.</td>
</tr>
<tr>
<td>S969</td>
<td>Spare electrodes</td>
</tr>
<tr>
<td>S976A</td>
<td>AC adapter for S123 v2</td>
</tr>
<tr>
<td>D5111</td>
<td>Electrode sharpener.</td>
</tr>
<tr>
<td>VGC-01</td>
<td>Cleaning brush</td>
</tr>
<tr>
<td>UM-1</td>
<td>User manual</td>
</tr>
</tbody>
</table>

Also available as a 4, 8, or 12 Fiber Ribbon Splicing configuration.
S153V2 Hand Held Active Clad Alignment Fusion Splicer

**Features**
- Active V-groove design helps to eliminate common fixed V-groove splicing errors.
- Rugged and compact hand held design for demanding environmental conditions.
- Fast splice (9 sec) with low loss and fast heating (25 sec) (by using semi-auto mode for splicing and preheating mode for heating).
- 200 cycles (splicing and heating) with FITEL series battery configuration (by using 2-batteries, semi-auto mode for splicing and regular mode for heating).
- Available for All METRO/LAN/FTTx fibers including ultra bend insensitive fibers (e.g. EZ-Bend® fiber).

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-FF153AV2</td>
<td>Value kit contains:</td>
</tr>
<tr>
<td>S153AH-1</td>
<td>Splicer main body.</td>
</tr>
<tr>
<td>S7125-250</td>
<td>250 µm fiber holders.</td>
</tr>
<tr>
<td>S943B</td>
<td>Battery (Qty 1).</td>
</tr>
<tr>
<td>S958B</td>
<td>Battery charger.</td>
</tr>
<tr>
<td>S976A</td>
<td>AC adapter for fusion splicer.</td>
</tr>
<tr>
<td>S977A</td>
<td>AC adapter for battery charger.</td>
</tr>
<tr>
<td>S325A</td>
<td>One-step high precision cleaver.</td>
</tr>
<tr>
<td>S969</td>
<td>Spare electrodes.</td>
</tr>
<tr>
<td>HCC-01</td>
<td>Hard carrying case.</td>
</tr>
<tr>
<td>VGC-01</td>
<td>V-groove cleaning brush.</td>
</tr>
<tr>
<td>D5111</td>
<td>Electrode cleaning disk.</td>
</tr>
<tr>
<td>D5111</td>
<td>Electrode cleaning disk.</td>
</tr>
<tr>
<td>F5111</td>
<td>Electrode cleaning disk.</td>
</tr>
<tr>
<td>FW-01</td>
<td>Fiber wipes.</td>
</tr>
<tr>
<td>S211B</td>
<td>Fiber stripper.</td>
</tr>
</tbody>
</table>

Fusion Splicing – Ribbon Splicing

12R Fusion Splicer

**Features**
- World’s smallest splicer at 4.76”W x 6.38”D x 2.24”H.
- Fully ruggedized for shock, moisture and dust resistance.
- Transit case converts to easy to use workstation.
- Dual camera, fixed V-groove alignment technology.
- Extended life electrodes.
- Long life battery (100 splices/shrinks per charge).

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-AFLS015571</td>
<td>Fujikura 12R Fusion Splicer which includes: ADC-19 AC adapter, BTR-10 battery pack (installed), FH-50-4 fiber holders (Pair), ACC-09 power cord, ELCT2-12 spare electrodes (Pair), operation manual on CD, quick reference guide, AP-01 alcohol container, SD01 screwdriver and CC-29 transit case.</td>
</tr>
<tr>
<td>S-AFLS015667</td>
<td>Fujikura 12R Fusion Splicer Kit which includes: CT-30 cleaver, ADC-19 AC adapter, BTR-10 battery pack (installed), FH-50-4 fiber holders (Pair), FH-50-250 fiber holders (Pair), FH-50-900 fiber holders (Pair), ACC-09 power cord, HR-03 hot jacket stripper, ELCT2-12 spare electrodes (pair), operation manual on CD, quick reference guide, AP-01 alcohol container, SD01 screwdriver and CC-29 transit case.</td>
</tr>
</tbody>
</table>
19R Fusion Splicer

Features
- Automated and programmable wind protector.
- 18-second automated tube heater.
- Fully ruggedized for shock, dust and moisture.
- Li-ion battery with 140 splices/shrinks per charge.
- On-board training and support videos.
- Internet software upgrades.
- Multifunction transit case with integrated workstation.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-AFLS015659</td>
<td>19R Fusion Splicer (machine only) which includes: ADC-18 AC adapter, ACC-14 AC cord, ELCT2-20A spare electrodes (pair), FH-50-4 fiber holder, USB cable, alcohol dispenser, screwdriver, sleeve loader, splicer carrying strap, quick reference guide, video instruction manual and CC30 transit case with carrying strap.</td>
</tr>
<tr>
<td>S-AFLS015661</td>
<td>19R Fusion Splicer Kit (with cleaver, battery and cord) which includes: BTR-09 battery, DCC-18 battery charge cord, CT30 cleaver, ADC-18 AC adapter, ACC-14 AC cord, ELCT2-20A spare electrodes (pair), FH-50-4 fiber holder, FH-50-250 fiber holder, FH-50-900 fiber holder, HJS-02 stripper, USB cable, alcohol dispenser, screwdriver, sleeve loader, splicer carrying strap, quick reference guide, video instruction manual and CC30 transit case with carrying strap.</td>
</tr>
</tbody>
</table>

70R Fusion Splicer

Features
- Automated and programmable wind protector.
- 40-second automated tube heater.
- Fully ruggedized for shock, dust and moisture.
- Li-ion battery with 110 splices/shrinks per charge.
- On-board training and support videos.
- Internet software upgrades.
- Multifunction transit case with integrated workstation.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-AFLS015669</td>
<td>70R Fusion Splicer (machine only) that includes: ADC-18 AC adapter, ACC-14 AC cord, ELCT2-20A spare electrodes (pair), FH-50-12 fiber holder, USB cable, alcohol dispenser, screwdriver, sleeve loader, splicer carrying strap, quick reference guide, video instruction manual and CC30 transit case with carrying strap.</td>
</tr>
<tr>
<td>S-AFLS015670</td>
<td>70R Fusion Splicer Kit (with cleaver) that includes: CT30 Cleaver, HJS-02 stripper, ADC-18 AC adapter, ACC-14 AC cord, ELCT2-20A spare electrodes (pair), FH-50-12 fiber holder, USB cable, alcohol dispenser, screwdriver, sleeve loader, splicer carrying strap, quick reference guide, video instruction manual and CC30 transit case with carrying strap.</td>
</tr>
<tr>
<td>S-AFLS015671</td>
<td>70R Fusion Splicer Kit (with cleaver, battery and cord) that includes: BTR-09 battery, DCC-18 battery charge cord, CT30 cleaver, HJS-02 stripper, ADC-18 AC adapter, ACC-14 AC cord, ELCT2-20A spare electrodes (pair), FH-50-12 fiber holder, USB cable, alcohol dispenser, screwdriver, sleeve loader, splicer carrying strap, quick reference guide, video instruction manual and CC30 transit case with carrying strap.</td>
</tr>
</tbody>
</table>
Ribbon Forming Adhesive

A key advantage of fiber arrangement tools is the use of the ribbon forming adhesive. Ribbons formed with this adhesive have excellent strippability, especially compared to ribbonizing methods using tape. Unlike tape methods, the paste does not gum-up the stripping tool and cause broken fibers. The paste holds the stripped coating residue into a single piece of debris that is easily cleaned from the stripper. If needed, the ribbon can be easily separated into individual fibers using alcohol.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-AFL-S008622</td>
<td>FAA-03A ribbon-forming adhesive (0.5 liter bottle).</td>
</tr>
<tr>
<td>S-AFL-S008720</td>
<td>FAA-03A ribbon-forming adhesive (4 oz. dispensing bottle).</td>
</tr>
</tbody>
</table>

Splice Protectors

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-PHS/60-50</td>
<td>Heat shrink protectors 60 mil – package of 50 (standard).</td>
</tr>
<tr>
<td>S-PNT-B</td>
<td>Butterfly protectors — .25 mm to .9 mm (Loose to Tight) – blue (package of 25).</td>
</tr>
<tr>
<td>S-PNT-G</td>
<td>Butterfly protectors — .9 mm to .9 mm (tight to tight) – green (package of 25).</td>
</tr>
<tr>
<td>S-PNT-Y</td>
<td>Butterfly protectors — .25 mm to .25 mm (loose to loose) – yellow (package of 25).</td>
</tr>
</tbody>
</table>

Fiber Arrangement Tools

The FAT-04 features an easy-to-use fiber arrangement method utilizing linear travel. The FAT-04 includes a spare paste applicator to allow ribbon making to continue even if one of the paste applicators needs cleaning.

The FAT-02 Fiber Arrangement Tool is an industry standard tool for forming individual 250 µm coated fibers into ribbons. The fiber arrangement method uses an arrangement spring. The fibers are placed into the proper position within the spring, eliminating the need to presort the fibers and place them into the tool in numerical sequence.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-AFL-S010212</td>
<td>FAT-04 fiber arrangement tool*1.</td>
</tr>
<tr>
<td>S-AFL-S002111</td>
<td>FAT-02 fiber arrangement tool*2.</td>
</tr>
<tr>
<td>S-AFL-S009016</td>
<td>SP-1 foam pads for FAT-04 (one set = 5 sheets of 25 pads each).</td>
</tr>
<tr>
<td>S-AFL-S010952</td>
<td>Paste applicator blocks for FAT-04 (2 pieces).</td>
</tr>
</tbody>
</table>
Mechanical Splicing

Mechanical splices are capable of aligning optical fibers with lower losses than optical connectors. They use index matching fluids to reduce Fresnel reflections and can meet industry splice standards for attenuation. Mechanical splices are the least expensive splicing method and may be reusable, but require a splicing tool kit. They are cost effective for installations involving smaller fiber counts, and are available for ribbon fibers. Other applications include acceptance testing of fiber optic cables, temporary connections, emergency restorations, and pigtail terminations.

UVC Splice Holder
The Norland UVC Splice Holder is a compact, precision machined fixture that holds the splice and fibers for optimum alignment and cure. The splice holder is made of anodized aluminum with stainless steel clips and is 13/8” x 3” x 5/8” in size.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-HHD</td>
<td>Norland precision splice holder.</td>
</tr>
</tbody>
</table>

UVC Splice
This easy to use, high performance connection incorporates a precision TRW alignment guide and a 1.5” glass sleeve in a one piece design that minimizes the handling of bare fiber. The fibers easily slide into the central glass guide and automatically align with pinpoint accuracy. The all glass construction provides the perfect thermal match for optical fibers assuring stability over wide temperature ranges.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-N1</td>
<td>Norland UVC Splice – For 125 to 140 micron fiber.</td>
</tr>
</tbody>
</table>

Index Matching Liquid
The Index Matching Liquid IML 150 is substituted for Norland Optical Adhesive when using the Norland Splice for temporary connections. This low viscosity index matching liquid will not cure and allows you to insert fibers into our splice over and over again.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-IML</td>
<td>Index matching liquid – syringe 6 cc.</td>
</tr>
</tbody>
</table>

OTDR Acceptance Test Kits
Fiber optic acceptance test kits offer a simple method to test optical fibers. These kits consist of a pigtail that is matched to the fiber, connector, and polish of your test equipment; a splice holder designed for 250- or 900-micron coated fibers; a reusable mechanical splice; and index matching fluid to reload the splice. (Fiber optic cleaving tools are available separately.)

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-NO-10</td>
<td>OTDR Acceptance Test Kit – kit with (10) reusable splices, (2) syringes index matching liquid and (1) two meter pigtail – need fiber size and connector type.</td>
</tr>
<tr>
<td>V-NO-5</td>
<td>OTDR Acceptance Test Kit – kit with (5) reusable splices, precision splice block, (2) syringes index matching liquid and (1) two meter pigtail – need fiber size and connector type.</td>
</tr>
</tbody>
</table>
SpliceConnect with Tool Kit

AFL’s SpliceConnect is a mechanical splice that provides an inexpensive, quick alternative to mating fibers. Using V-groove technology, this splice maintains physical contact between the fibers. An assembly tool is used to ensure the fibers are mated correctly, resulting in less than 0.1 dB insertion loss (typical for single-mode). The SpliceConnect secures both fiber and coating independently with the U-shaped sleeve, enhancing the strength against fiber twist.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-AFL-CS004154</td>
<td>SpliceConnect Mechanical Splices (Bag of 6).</td>
</tr>
<tr>
<td>S-AFL-CS004162</td>
<td>SpliceConnect Mechanical Splice Tool Kit.</td>
</tr>
<tr>
<td>S-AFL-CS004155</td>
<td>Kit Includes:</td>
</tr>
<tr>
<td>S-AFL-CS004442</td>
<td>SpliceConnect Mechanical Splicing Tool.</td>
</tr>
<tr>
<td>S-AFL-CS004443</td>
<td>Fiber holder, 250 µm.</td>
</tr>
<tr>
<td>S-AFL-CS004159</td>
<td>Fiber holder, 900 µm.</td>
</tr>
<tr>
<td>S-AFL-CS004160</td>
<td>Instruction manual.</td>
</tr>
<tr>
<td>S-AFL-CS004161</td>
<td>Instruction video.</td>
</tr>
<tr>
<td>S-AFL-CS004155</td>
<td>Carrying case.</td>
</tr>
<tr>
<td>S-AFL-CS004442</td>
<td>Fiber holder, 250 µm.</td>
</tr>
<tr>
<td>S-AFL-CS004443</td>
<td>Fiber holder, 900 µm.</td>
</tr>
</tbody>
</table>

CT-06 Fiber Cleaver

**Features**
- Dedicated for single fiber cleaving.
- Simple and single-step operation.
- Blade life up to 48,000 cleaves.
- Compact and light weight.
- Equipped with fiber scrap collector.

**Included with the Cleaver**
- AD-10 adapter plate (CT-06A).
- CC-28 carrying case.
- Hex wrench.
- Scrap collector.
- Instruction manual.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-1CT-06A</td>
<td>AFL CT-06A Precision Cleaver.</td>
</tr>
</tbody>
</table>

CT-30 Series Fiber Cleaver

**Features**
- Dedicated for single fiber cleaving.
- Simple and single-step operation.
- Blade life up to 48,000 cleaves.
- Compact and light weight.
- Equipped with fiber scrap collector.

**Included with the Cleaver**
- AD-30A adapter plate (CT30A only).
- FC-02 fiber collector.
- FDB-02 scrap box (small).
- FDB-03 scrap box (large).
- SC-01 side cover (installed).
- CC-21 carrying case.
- Hex wrench (1.5 mm).
- Instruction manual.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-1CT-30</td>
<td>AFL CT-30 precision cleaver.</td>
</tr>
<tr>
<td>T-1CT-30A</td>
<td>AFL CT-30A precision cleaver.</td>
</tr>
</tbody>
</table>
Cleavers

**S315 Single Fiber Cleaver**

**Features**
The FITEL S315 single fiber cleaver is designed to cleave fibers quickly and accurately. This cleaver will accommodate 250µm to 900µm coating diameters. The S315 cleaver is available with a scale, allowing fiber cleave lengths from 2 to 20 mm. This cleaver is used for mechanical splices or field installation connectors. The cleave quality depends on the skill of operator and may not be suitable for fusion splicing.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-1VL</td>
<td>FITEL field cleaver (score and snap) with fully graduated leaf spring.</td>
</tr>
</tbody>
</table>

**S325A Handheld High Precision Cleaver**

**Features**
- One-step action.
- Cleave anywhere! In your palm or on your desktop.
- Easy fiber loading.
- Simple operation.
- High capacity waste fiber collection.
- Durable design.
- Easy maintenance on-site.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-15325A</td>
<td>Fitel Handheld High Precision Cleaver with high capacity waste fiber bib.</td>
</tr>
</tbody>
</table>

**Cleaning Supplies**

**One-Click® Cleaner**

**Features**
- Cleans both APC and UPC connectors.
- Ergonomic, comfortable design with single action cleaning.
- Precise mechanical action delivers consistent cleaning results.
- Low cost per clean with over 500 cleanings in one unit.
- Effective on a variety of contaminates including dust and oils.
- Automatic advance ensures each clean is performed with fresh cleaning tape.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-817</td>
<td>AFL Test and Measurement 8500-05-0001MZ One Click Cleaner SC, ST, FC.</td>
</tr>
<tr>
<td>E-818</td>
<td>AFL Test and Measurement 8500-05-0002MZ One Click Cleaner LC, MU.</td>
</tr>
</tbody>
</table>

**One-Click® Cleaner MPO**

**Features**
The One-Click Cleaner is designed to clean MPO and MTP® multi-fiber connectors used in Data Centers and other high density optical networks. The new One-Click Cleaner MPO is a push-type cleaner which simplifies cleaning of the ferrule end-face of both exposed MPO/MTP® connectors and MPO/MTP® connectors in adapters.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contact for specific part number and ordering information.</td>
</tr>
</tbody>
</table>

**FCP2 Field Portable Connector Cleaning Kits**

**Features**
The Basic Cleaning Kit includes FCC2 cleaning fluid, One-Clicks for SC, ST, FC, LC and MU connectors, FiberWipes, and a Cletop SB. Options available to include inspection, MPO/MTP cleaning, and loss testing capabilities.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contact for specific part number and ordering information.</td>
</tr>
</tbody>
</table>
FCP1 Fiber Cleaning Pack

Features
AFL Telecommunications offers a complete selection of AFL Test and Measurement brand fiber optic cleaning kits for field cleaning of connector end faces in fiber frames, adapters and on jumpers. Using our exclusive FCC2 non-hazardous cleaning fluid and CCT molded cleaning tips, the FCP1 Series of kits delivers compact, safe, easy to use, reliable cleaning for all types of fiber optic connector end faces including Military and Multiple Fiber Ferrule designs.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
</table>
| E-FCP1-0914 | Cleaning Kit includes:  
2 tubes – 2.5 mm cleaning tips.  
1 tubes – 1.25 mm cleaning tips.  
1 tubes – 2.5 mm, 2.0 mm, 1.6 mm exposed ferrules cleaning tips.  
1 each Cletop type SB connector cleaning reel.  
1 each non-hazardous cleaning fluid.  
Mountable carrying case. |

Additional kits available. Please contact for more information.

CCT Connector Cleaning Tips

Features
AFL Test and Measurement Test and Inspection is pleased to offer a unique technology in fiber connector endface cleaning. Rather than a fabric-covered or foam-covered stick, we are offering a molded cleaning tip that will trap contamination and wick cleaning solvents from bulkhead connectors. This new cleaning tip is a molded, sintered polymer that is both porous and pliable conforming to virtually any fiber endface polish geometry while trapping and absorbing contaminants.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-819</td>
<td>Connector Cleaning Tips for 2.5 mm ferrules green (40 sticks per tube).</td>
</tr>
<tr>
<td>E-819B</td>
<td>Connector Cleaning Tips for 1.25 mm ferrule blue (40 sticks per tube).</td>
</tr>
</tbody>
</table>

Cletop Cassette Cleaner

Features
The Cletop optical fiber connector cleaners are a rugged handheld tool for quickly and efficiently cleaning fiber optic connector end faces. These cleaners have refillable cleaning tapes (400 cleans per tape) making them ideal for lab and field use. The simple push button shutter operation makes cleaning connectors quick and easy.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-812</td>
<td>Cletop Type A fiber optic connector cleaner</td>
</tr>
<tr>
<td>E-812B</td>
<td>Cletop Type B fiber optic connector cleaner</td>
</tr>
<tr>
<td>E-813</td>
<td>Cletop fiber optic connector cleaner – replacement tape (white)</td>
</tr>
<tr>
<td>E-813B</td>
<td>Cletop fiber optic connector cleaner – replacement tape Type S (white)</td>
</tr>
</tbody>
</table>

Splicer V-Groove Cleaning Kit

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
</table>
| S-AFLS014397 | AFL V-Groove Cleaning Kit. Kit includes:  
Scrubber brush with stiff tapered nylon bristles.  
Sweeper brush with soft nylon bristles.  
Eye loupe with 3X to 12X magnification.  
LED pen light with momentary or constant on switching.  
Cleaning fluid that is nonflammable and environmentally safe.  
Lint-free cotton swabs.  
Instruction sheet with illustrations.  
Canvas carrying case. |
The Light Brigade Pro-AV cleaning kit has the cleaning supplies necessary for cleaning 2.5 mm and 1.25 mm fiber optic connections.

### Part # Description

| Pro AV Cleaning Kit which includes:  
Fiber optic connector cleaner – Cletop type A.  
AFL Test and Measurement 8500-05-002MZ One-Click Cleaner LC, MU.  
AFL Test and Measurement 8500-05-001MZ One-Click Cleaner SC, ST, FC.  
AlcoPads – 4” x 3” wipes – box of 80. |

**Pro A/V Cleaning Kit**

**Features**

This is a great kit to have on hand at the patch panel for quick cleaning of connectors and sleeves prior to mating. There are two kits available: the regular Fiber Optic Cleaning Kit and the International Fiber Optic Cleaning Kit.

### Part # Description

| E-250-K Fiber Optic Cleaning Kit  
E-250-K-INT International Fiber Optic Cleaning Kit |

### Fiber Optic Cleaning Kit includes:

| Part # Description  
E-807-001 ChemPad (20 each).  
E-808-001 OpticPad (20 each).  
E-814-001 Cletop stick type cleaner (2.5 mm ferrule) (20 each).  
E-805-100 EconoWipes 4” x 4” (101.6 mm x 101.6 mm), 100/package (1 each).  
E-122-001 Fluorocarbon free canned air – 10oz (295.7 ml) can (non-flammable) filtered to 0.2 micro meters (1 ea).  
E-711-001 Empty 1 ounce (29.57 ml) squeeze bottle (1 each). |

### International Fiber Optic Cleaning Kit includes:

| Part # Description  
E-807-001 ChemPad (20 each).  
E-808-001 OpticPad (20 each).  
E-814-001 Cletop stick type cleaner (2.5 mm ferrule) (20 each).  
E-805-100 EconoWipes 4” x 4” (101.6 mm x 101.6 mm), 100/package (1 each).  
E-711-001 Empty 1 ounce (29.57 ml) squeeze bottle (1 each). |

**Safety Tools**

| Part # Description  
T-64MM Fiber splitter removal tweezers.  
T-681 Ripley safety kit.  
T-682 Black work mat 14” x 22”.  
T-683 Handy fiber scrapes trash can.  
T-684 Safety glasses.  
W-60-221 Fiber Optic Safety DVD (see pg 115 for description) |
Light Sources

OLS1 Multimode LED Light Source

**Features**
- Rugged, handheld, lightweight.
- 850 and 1300 nm LED (multimode) light sources (660 nm available).
- Certify 50 µm or 62.5 µm multimode fiber links for any 850 or 1300 nm application, including Gigabit Ethernet (Gbe) per TIA standards.
- Free 50 µm and 62.5 µm mandrels.
- Long battery life.
- Cost effective, easy to use.
- NIST traceable.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN-OLS1DUALXX</td>
<td>AFL Test and Measurement Optical LED Source – multimode 850/1300 nm dual LED source</td>
</tr>
<tr>
<td>Note: Must specify connector interface (XX) when placing an order.</td>
<td></td>
</tr>
</tbody>
</table>

OLS2-Dual Laser Single-mode Light Source

**Features**
- Handheld, rugged, lightweight.
- Dual wavelengths from a single port.
- Dual or single Wave ID, CW, tone.
- 270 Hz, 330 Hz, 1 kHz, 2 kHz tone.
- Adjustable output.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN-OLS2DUALXX</td>
<td>AFL Test and Measurement Optical Laser Source – single-mode 1310/1550 nm dual laser source</td>
</tr>
<tr>
<td>Note: Must specify connector interface (XX) when placing an order.</td>
<td></td>
</tr>
</tbody>
</table>

OLS4 Integrated Laser and LED Multimode and Single-mode Source

**Features**
- Handheld, rugged, lightweight.
- Integrated LED and laser light source.
- Dual wavelengths from a single port.
- Dual or single wave ID, CW, tone (SM output).
- 270 Hz, 330 Hz, 1 kHz, 2 kHz tone.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN-OLS4-XX</td>
<td>AFL Test and Measurement Optical Source OLS 4 single-mode/multimode at 850/1300 nm LED source and 1310/1550 nm laser source</td>
</tr>
<tr>
<td>Note: Must specify connector interface (XX) when placing an order.</td>
<td></td>
</tr>
</tbody>
</table>
CSS1-MM LED Source

Features
• 850 nm and 1300 nm LED output from single test port.
• 50 µm and 62.5 µm mandrels included.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN-CSS1-MM-XX</td>
<td>AFL Test and Measurement LED Source – multimode – (1310/1550 nm) with XX interface.</td>
</tr>
</tbody>
</table>

Note: Must specify connector interface (XX) when placing an order.

CSS1-SM Laser Source

Features
• 1310 nm and 1550 nm LASER output from single test port.
• Output port accepts UCI threaded adapters (FC, SC, ST, LC) for flexibility and access to launch fiber for cleaning and inspection.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
</table>

Note: Must specify connector interface (XX) when placing an order.

OLS7 Triple Wavelength Laser Sources

Features
AFL Test and Measurement OLS7 Triple Wavelength Laser Sources are handheld, rugged laser sources designed for performing insertion loss measurements on single-mode fiber optic links when used with an optical power meter. When paired with an optical fiber identifier (OFI-200D), both models may be used for fiber identification. The LASER output is stabilized to ensure accurate test results per current TIA and ISO standards requirements.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN-OLS7-FTTx</td>
<td>Single-mode 1310, 1490, 1625 FTTH networks.</td>
</tr>
<tr>
<td>YN-OLS7-3</td>
<td>Single-mode 1310, 1550, 1625 FTTh networks.</td>
</tr>
</tbody>
</table>

OLS AC Adapter and Connector Adapters

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN-2900-50-0002MR</td>
<td>FC connector adapter.</td>
</tr>
<tr>
<td>YN-2900-50-0004MR</td>
<td>ST connector adapter.</td>
</tr>
<tr>
<td>YN-2900-50-0006MR</td>
<td>LC connector adapter.</td>
</tr>
<tr>
<td>YN-8800-00-0072PR</td>
<td>Universal flip-top dust cap for UCI outputs.</td>
</tr>
<tr>
<td>YN-4050-00-0119P</td>
<td>100-240 VAC to 9 VDC AC adapter.</td>
</tr>
</tbody>
</table>
Light Source — FLS-300

Features
- Can transmit with a wavelength-identification digital encrypted protocol so that any compatible unit can automatically use the proper calibration parameters.
- Autonomy of 120 hours.
- Instrument identification available in six languages.
- Highest output power in the industry.
- Three-year warranty and recommended calibration interval, for dramatically reduced cost of ownership.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YE-FLS-300-12D-XX</td>
<td>Multimode 850/1300 nm LED 62.5/125 µm.</td>
</tr>
<tr>
<td>YE-FLS-300-12D-23BL-XX</td>
<td>Quad 850/1300 nm LED 62.5/125 µm, 1310/1550 nm laser 9/125 µm.</td>
</tr>
</tbody>
</table>

Note: Must specify connector interface (XX) when placing an order.

Light Source — FLS-600

Features
- Up to three single-mode wavelengths (1310 nm, 1550 nm, and 1490 nm or 1625 nm) on a single port, or four wavelengths (850/1300 nm and 1310/1550 nm) on two ports.
- Three-year warranty for low cost of ownership.
- Error-free, time-saving test features.
- Controlled multimode launching output.
- EF Ready: Use with external launch mode conditioner for EF-compliant multimode results.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YE-FLS-600-12D-XX</td>
<td>Multimode 850/1300 nm LED source 62.5/125 µm.</td>
</tr>
<tr>
<td>YE-FLS-600-12D-23BL-XX</td>
<td>Quad 850/1300 nm LED source 62.5/125 µm, 1310/1550 nm laser 9/125 µm.</td>
</tr>
</tbody>
</table>

Note: Must specify connector interface when placing an order.
Power Meters

Optical Power Meters

Features
- Four models provide wide wavelength and power level ranges.
- Stores optical references for each calibrated wavelength.
- Auto-detects test tones for use in fiber identification.
- Optical input port accepts a variety of thread-on adapter caps.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN-CSM13</td>
<td>AFL Test and Measurement Optical Power Meter.</td>
</tr>
<tr>
<td>YN-CSM12</td>
<td>AFL Test and Measurement 850/1300/1310/1550 germanium +6 to -60 dB, dBm, W (2) AA.</td>
</tr>
</tbody>
</table>

OPM4 Optical Power Meter

Features
- Multimode or single-mode applications.
- Wave ID (auto identification and switching).
- Multiple-wavelength testing.
- 270 Hz, 330 Hz, 1 kHz, 2 kHz Tone detection.
- Large LCD with backlight.
- Reference power level storage.
- Power measurements in dBm or µW; insertion loss in dB.
- Power externally via USB port.
- Automatic power-off function.
- Battery gauge.
- Long battery life with 2 AA alkaline.
- Handheld, rugged, lightweight.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
</table>

OPM5 Optical Power Meter

Features
- Multimode or single-mode applications.
- Wave ID (auto identification/switching).
- Multiple-wavelength testing.
- 270 Hz, 330 Hz, 1 kHz, 2 kHz tone detection.
- Large LCD with backlight.
- Power measurements in dBm or µW; insertion loss in dB.
- Storage capability more than 500 fibers.
- Reference power level storage.
- File management system organizes stored test data.
- USB port and Windows® compatible software for download of stored data.
- Automatic power-off function.
- Battery gauge.
- Long battery life with 2 AA alkaline, optional AC adapter.
- Handheld, rugged, lightweight.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
</table>
**Power Meter — FPM-300**

**Features**
- Highly accurate unit offering 10 calibrated wavelengths and reference values.
- No offset nulling required, reducing measurement time.
- Three-year warranty and recommended calibration interval, for dramatically reduced cost of ownership.
- Autonomy of over 300 hours.
- Instrument identification available in six languages.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YE-FPM-302-XX</td>
<td>Ge detector, power range +10 dBm to –60 dBm.</td>
</tr>
<tr>
<td>YE-FPM-302X-XX</td>
<td>High-power Ge detector, power range +26 dBm to –50 dBm.</td>
</tr>
</tbody>
</table>

Note: Must specify connector interface (xx) when placing an order.

**Power Meter — FPM-600**

**Features**
- Adapts to all network types: LAN, CWDM, DWDM, etc.
- Error-free, time-saving features: automatic wavelength recognition, and no offset nulling required.
- High accuracy, wide dynamic range and high power measurement capability (up to 26 dBm).
- User-configurable pass/fail thresholds with LED indicator.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YE-FPM-602-XX</td>
<td>Ge detector, power range +10 dBm to –70 dBm.</td>
</tr>
<tr>
<td>YE-FPM-602X-XX</td>
<td>High-power Ge detector, power range +26 dBm to –55 dBm.</td>
</tr>
</tbody>
</table>

Note: Must specify connector interface (xx) when placing an order.

**PON Power Meter — PPM-350C**

**Features**
- Concurrent measurement of all PON signals, anywhere on the network.
- Innovative workflow management, for boosted test routine efficiency.
- Enhanced rugged and weatherproof design.
- Protected data format, for guaranteed test result authenticity.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YE-PPM-352C-XX-XX</td>
<td>PON power meter, two ports, extended range, B-PON, EPON, G-PON FTtX mode: 1310/1490/1550 nm. Power measurement range — pass zone for continuous data stream. 1310 nm: +8 dBm to –40 dBm. 1490 nm: +12 dBm to –40 dBm. 1550 nm: +25 dBm to –40 dBm.</td>
</tr>
<tr>
<td>YE-PPM-353C-XX-XX</td>
<td>PON power meter, two ports, extended range, B-PON, EPON, G-PON FTtX mode: 1310/1490 nm. Power measurement range — pass zone for continuous data stream. 1310 nm: +8 dBm to –40 dBm 1490 nm: +12 dBm to –40 dBm 1550 nm: N/A</td>
</tr>
</tbody>
</table>

Note: First XX = Visual fault locator.
00=Without visual fault locator.
VFL=With visual fault locator.

Note: Must specify connector interface (second XX) when placing an order.
Test Equipment

Optical Loss Test Kits

**SLP5-6D Single-mode Test Kit**

**Features**
- Handheld, rugged, lightweight.
- Wave ID (auto identification and switching).
- Dual or single wave ID, CW, tone.
- 270 Hz, 330 Hz, 1 kHz, 2 kHz tone.
- Adjustable output.
- Large LCD with backlight (OPM5-4D).
- Power measurements in dBm or µW; insertion loss in dB.
- Reference power level storage.
- Up to 500 records per wavelength storage.
- USB port for download of stored records.
- Windows® compatible software to view, print, and archive stored records.
- Low battery indicator.
- Long battery life with 2 AA alkaline, optional AC adapter.
- Cost effective, easy to use.
- NIST traceable.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN-SLP46-XX</td>
<td>Optical Loss Test Kits—single-mode kits — OPM 4-3C meter at 850/1300/1550 nm and laser source OLS 2 dual at 1310/1550 nm.</td>
</tr>
</tbody>
</table>

Note: Must specify connector interface (XX) when placing an order.

**SLP4-D Single-mode Test Kit**

**Features**
- Handheld, rugged, lightweight.
- Wave ID (auto identification and switching).
- Dual or single wave ID, CW, tone.
- 270 Hz, 330 Hz, 1 kHz, 2 kHz tone.
- Power measurements in dBm or µW; insertion loss in dB.
- Reference power level storage.
- Adjustable output.
- Large LCD with backlight (OPM4-4D).
- Low battery indicator.
- Long battery life with 2 AA alkaline.
- Cost effective, easy to use.
- NIST traceable.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN-SLP56-XX</td>
<td>Optical Loss Test Kits—single-mode kits — OPM 5-3B meter at 850/1300/1550 nm and laser source OLS 2 dual at 1310/1550 nm. Note: must specify connector interface when ordering.</td>
</tr>
</tbody>
</table>

Note: Must specify connector interface (XX) when placing an order.

**SMLP4-4 Single-mode/Multimode Test Kit**

**Features**
- Handheld, rugged, lightweight.
- Wave ID (auto identification and switching).
- Dual or single wave ID, CW, tone.
- 270 Hz, 330 Hz, 1 kHz, 2 kHz tone.
- Large LCD with backlight (OPM4-2D).
- Reference power level storage.
- Power measurements in dBm or µW; insertion loss in dB.
- Low battery indicator.
- Long battery life with 2 AA alkaline.
- Free 50 µm and 62.5 µm mandrels.
- Cost effective, easy to use.
- NIST traceable.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
</table>

Note: Must specify connector interface (XX) when placing an order.
**SMLP5-5 Single-mode/Multimode Test Kit**

**Features**

- Handheld, rugged, lightweight.
- Wave ID (auto identification and switching).
- Dual or single wave ID, CW, tone.
- 270 Hz, 330 Hz, 1 kHz, 2 kHz tone.
- Large LCD with backlight (OPM5-2D).
- Power measurements in dBm or µW; insertion loss in dB.
- Reference power level storage.
- Up to 500 records per wavelength storage.
- USB port for download of stored records.
- Windows® compatible software to view, print, and archive stored records.
- Low battery indicator.
- Long battery life with 2 AA alkaline, optional AC adapter.
- Free 50 µm and 62.5 µm mandrels.
- Cost effective, easy to use.
- NIST traceable.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN-SMLP44-XX</td>
<td>AFL Test and Measurement Optical Loss Test Kit- single-mode/multimode kit – OPM 4-2D meter at 850/1300/1550 and OLS 4 light source at 850/1300/1310/1550 nm. Note: must specify connector interface when ordering.</td>
</tr>
</tbody>
</table>

Note: Must specify connector interface (XX) when placing an order.

**Optical Loss Test Kits- SM and MM Kits**

**Features**

**CSS1-SM Laser Source**

- 1310 nm and 1550 nm LASER output from single test port.
- Output port accepts UCI threaded adapters (FC, SC, ST, LC) for flexibility and access to launch fiber for cleaning and inspection.

**CSS1-MM LED Source**

- 850 nm and 1300 nm LED output from single test port.
- 50 µm and 62.5 µm mandrels included.

**Power Meter**

- Stores optical references for each calibrated wavelength.
- Auto-detects Test Tones for use in fiber identification.
- Optical input port accepts a variety of thread-on adapter caps.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN-CXSM2</td>
<td>Optical Loss Test Kits- single-mode and multimode Kits – CSM1-2 power meter 40 dB at 850/1300 nm and LED source CSS1-MM at 850/1300 nm / CSS1-SM 60 dB at1310/1550 nm – SC interface.</td>
</tr>
</tbody>
</table>
FOT-300

**Features**
The most optimized OLTS on the market. Offers up to three single-mode or two multimode wavelengths on a single port and transmits with a wavelength-identification digital encrypted protocol, allowing any compatible unit to automatically use the proper calibration parameters.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YE-FOF-302-12D-XX-XX</td>
<td>Ge detector, 850/1300 nm LED source 62.5/125 µm.</td>
</tr>
<tr>
<td>YE-FOF-302X-23BL-XX-XX</td>
<td>High-power Ge detector, 1310/1550 nm laser source 9/125 µm.</td>
</tr>
<tr>
<td>Note: Must specify connector interface (XX) when placing an order.</td>
<td></td>
</tr>
</tbody>
</table>

FOT-600

**Features**

- Error-free, time-saving features: automatic wavelength recognition, and no offset nulling required.
- Easy data management and USB transfer to a PC.
- Automatic wavelength switching function for multiwavelength testing.
- Standard visual fault locator (VFL) for quick and easy troubleshooting.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note: Must specify connector interface for power meter and light source and with or without VFL.</td>
<td></td>
</tr>
</tbody>
</table>

Specifications are subject to change without notice.
FTK Pro Installer Kit

Features
- Multimode and single-mode fiber ready.
- Available with M210 QUAD OTDR with VFL.
- Includes OPM5-2C Power Meter, OLS4 Light Source and accessories.
- Reporting software to present network owners with written proof of a quality installation.
- Includes inspection scope and cleaning supplies.
- Rugged transit case with pull handle and wheels.
- Test results manager for documenting networks and generating acceptance reports.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN-FTK1-01-0900PR</td>
<td>Contact Light Brigade for details.</td>
</tr>
<tr>
<td>YN-FTK1-01-0902PR</td>
<td>Contact Light Brigade for details.</td>
</tr>
</tbody>
</table>

FLX380 FlexTester3 Complete/Complete2 Kits

Features
Everything you need for complete optical network verification and troubleshooting at significant savings! Each FLX380 FlexTester3 Complete or Complete2 Kit includes user-selected FLX380-30x FlexTester3 with LinkMap, FOCIS PRO or FOCIS Flex connector inspection with IEC pass/fail analysis and AFL's unique image-pairing (patent pending), UPC or APC inspection adapter tips, optical fiber identifier (OFI), 150 m fiber ring, cleaning supplies, and standard FlexTester3 accessories conveniently packaged in a rugged, waterproof hard carry case.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN-FLX380-3xx[C]-CMP-[LNG]-[AC]-[FR]</td>
<td>FLX380-3xx Complete Kit (with FOCIS PRO, OFI-200D, fiber ring and cleaning supplies).</td>
</tr>
<tr>
<td>YN-FLX380-3xx[C]-CMP2-[LNG]-[AC]-[TIP]-[FR]-[OFI]</td>
<td>FLX380-3xx Complete2 Kit (with FOCIS Flex, OFI choice, fiber ring and cleaning supplies).</td>
</tr>
</tbody>
</table>

FLX380 FlexTester3 PRO/PRO2 Kits

Features
FlexTester with FOCIS PRO Connector Inspection and Cleaning. Each FLX380 FlexTester3 PRO or PRO2 Kit includes user-selected FLX380-30x FlexTester3 with LinkMap, FOCIS PRO or FOCIS Flex connector inspection with IEC pass/fail analysis and AFL’s unique image-pairing (patent pending), UPC or APC inspection adapter tips, cleaning supplies, and standard FlexTester3 accessories conveniently packaged in a rugged, waterproof hard carry case.

<table>
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<tr>
<th>Part #</th>
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</thead>
<tbody>
<tr>
<td>YN-FLX380-3xx[C]-PRO-[LNG]-[AC]</td>
<td>FLX380-3xx PRO Kit (with FOCIS PRO and cleaning supplies).</td>
</tr>
<tr>
<td>YN-FLX380-3xx[C]-PRO2-[LNG]-[AC]-[TIP]-[FR]</td>
<td>FLX380-3xx PRO2 Kit (with FOCIS Flex, fiber ring and cleaning supplies).</td>
</tr>
</tbody>
</table>
M310 Enterprise OTDR

Features
- Industry Leading TruEvent™ analysis ensures event reporting accuracy
- Short dead zones enable detection of closely spaced events
- Integrated Source, Power Meter and VFL
- LinkMap™ visually display network
- Live fiber detection prevents damage to network equipment
- Inspection capable with DFS1 Digital FiberScope
- Dynamic Range up to 38 dB
- Multiple languages supported
- 16 hour battery run time
- Automatic Pass/Fail Analysis (TIA/ISO)

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN-M310-20U-01</td>
<td>M310 1310/1550 nm 38/37 dB single-mode OTDR.</td>
</tr>
<tr>
<td>YN-M310-25U-01</td>
<td>M310 850/1300/1310/1550 nm 30/30/38/37 dB quad OTDR.</td>
</tr>
<tr>
<td>YN-M310-25U-01-AA</td>
<td>M310 850/1300/1310/1550 nm 30/30/38/37 dB quad OTDR advanced analysis option and TRM advanced analysis software.</td>
</tr>
<tr>
<td>YN-M310-20U-01-AA</td>
<td>M310 1310/1550 nm 38/37 dB single-mode OTDR advanced analysis option and TRM advanced analysis software.</td>
</tr>
<tr>
<td>YN-M310-25U-01-HC</td>
<td>M310 850/1300/1310/1550 nm 30/30/38/37 dB quad OTDR hard case.</td>
</tr>
<tr>
<td>YN-M310-25U-01-HC-AA</td>
<td>M310 850/1300/1310/1550 nm 30/30/38/37 dB quad OTDR hard case advanced analysis option and TRM advanced analysis software.</td>
</tr>
<tr>
<td>YM-M310-25K-01-HC1</td>
<td>M310 850/1300/1310/1550 nm 30/30/38/37 dB quad OTDR DFS1 inspection probe hard case.</td>
</tr>
<tr>
<td>YN-M310-20K-01-HC1</td>
<td>M310 1310/1550 nm 38/37 dB single-mode OTDR DFS1 inspection probe hard case.</td>
</tr>
<tr>
<td>YN-M310-25K-01-HC1-AA</td>
<td>M310 850/1300/1310/1550 nm 30/30/38/37 dB quad OTDR DFS1 inspection probe hard case advanced analysis option and TRM advanced analysis software.</td>
</tr>
<tr>
<td>YN-M310-20K-01-HC1-AA</td>
<td>M310 1310/1550 nm 38/37 dB single-mode OTDR DFS1 inspection probe hard case advanced analysis option and TRM advanced analysis software.</td>
</tr>
<tr>
<td>YN-M310-25K-01-HC2</td>
<td>M310 850/1300/1310/1550 nm 30/30/38/37 dB quad OTDR DFS1 inspection probe OLS 4 quad light source hard case.</td>
</tr>
<tr>
<td>YN-M310-25K-01-HC2-AA</td>
<td>M310 850/1300/1310/1550 nm 30/30/38/37 dB quad OTDR DFS1 inspection probe OLS5-dual quad light source hard case advanced analysis option and TRM advanced analysis software.</td>
</tr>
<tr>
<td>YN-M310-20K-01-HC2-AA</td>
<td>M310 1310/1550 nm 38/37 dB single-mode OTDR DFS1 inspection probe OLS5-dual multimode light source hard case advanced analysis option and TRM advanced analysis software.</td>
</tr>
</tbody>
</table>
FLX380-30x Single-mode FlexTester3 OTDR

**Features**
- Third generation handheld, all-in-one OTDR, OLS, OPM, VFL.
- Patented in- or out-of-service testing from a single port.
- 42/42 dB dynamic range at 1310/1550 nm; test up to 1x128 PON.
- Industry-leading 0.8/2.5/30 m event/attenuation/PON dead zones.
- ServiceSafe® live PON detection and OTDR test without service disruption.
- Integrated OLS/OPM with wave ID reduces test time 80% and eliminates setup errors.
- Rugged, handheld and lightweight (less than 1 kg).
- High-contrast display: clear and bright, even in direct sunlight.
- Industry leading battery life: over 12 hours operation from a single charge.
- It’s all about speed: with Instant On, you’re ready to test in less than 5 seconds.

<table>
<thead>
<tr>
<th>Part #</th>
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</tr>
</thead>
<tbody>
<tr>
<td>YN-FLX380-3xx[C]-[LNG]-[AC]</td>
<td>FLX380-3xx basic kit.</td>
</tr>
<tr>
<td>YN-FLX380-3xx[C]-LM-[LNG]-[AC]</td>
<td>FLX380-3xx basic kit with LinkMap™ upgrade with pass/fail plus TRM® 2.0 advanced.</td>
</tr>
<tr>
<td>YN-FLX380-3xxX-LM-[LNG]</td>
<td>LinkMap upgrade with pass/fail plus TRM® 2.0 advanced (for previously shipped FLX380).</td>
</tr>
<tr>
<td>YN-FLX380-3xx[C]-PRO-[LNG]-[AC]</td>
<td>FLX380-3xx PRO Kit (with FOCIS PRO and cleaning supplies).</td>
</tr>
<tr>
<td>YN-FLX380-3xx[C]-PRO2-[LNG]-[AC]-[TIP]-[FR]</td>
<td>FLX380-3xx PRO2 Kit (with FOCIS Flex, fiber ring and cleaning supplies).</td>
</tr>
<tr>
<td>YN-FLX380-3xx[C]-CMP-[LNG]-[AC]-[FR]</td>
<td>FLX380-3xx Complete Kit (with FOCIS PRO, OFI-200D, fiber ring and cleaning supplies).</td>
</tr>
<tr>
<td>YN-FLX380-3xx[C]-CMP2-[LNG]-[AC]-[TIP]-[FR]-[OFI]</td>
<td>FLX380-3xx Complete2 Kit (with FOCIS Flex, OFI choice, fiber ring and cleaning supplies).</td>
</tr>
</tbody>
</table>

OFL280-10x Single-mode FlexTester Family

**Features**
- PON OTDR – FTTx PON construction certification.
- Live Fiber OTDR – FTTx service turn-up and troubleshooting.
- End Locator – Quickly locate breaks or measure fiber length.
- Expert OTDR – Full function OTDR for experienced users.
- Real-Time OTDR – Fault location, splice verification, first connector checker.
- Optical Power Meter – Measure optical power or fiber loss.
- Full Auto OTDR – Normal (point-to-point) fiber cable construction testing and fault location.
- Laser Source – Measure end-to-end loss or trace fibers using the tone feature and a AFL Test and Measurement OFI.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN-OFL280-1xx[C]-[LNG]-[AC]</td>
<td>OFL280-1xx basic kit.</td>
</tr>
<tr>
<td>YN-OFL280-1xx[C]-LM-[LNG]-[AC]</td>
<td>OFL280-1xx basic kit with LinkMap™ upgrade with pass/fail plus TRM® 2.0 advanced.</td>
</tr>
<tr>
<td>YN-OFL280-1xxX-LM-[LNG]</td>
<td>LinkMap upgrade with pass/fail plus TRM® 2.0 advanced (for previously shipped OFL280).</td>
</tr>
<tr>
<td>YN-OFL280-1xx[C]-PRO-[LNG]-[AC]</td>
<td>OFL280-1xx Pro Kit (with FOCIS PRO and cleaning supplies).</td>
</tr>
<tr>
<td>YN-OFL280-1xx[C]-PRO2-[LNG]-[AC]-[TIP]-[FR]</td>
<td>OFL280-1xx PRO2 Kit (with FOCIS Flex, fiber ring, cleaning supplies).</td>
</tr>
</tbody>
</table>
FlexScan OTDR with SmartAuto™ and LinkMap™

Features

- Fast, accurate SmartAuto OTDR network characterization or fault location
- Easy to understand LinkMap results with pass/fail indications
- 1550 only or 1310/1550 OTDR
- Rugged & pocket-sized; < 1 lb (0.4 kg)
- Large, bright indoor/outdoor touchscreen
- Integrated VFL, plus Wave ID source and power meter
- Bluetooth, Wi-Fi and USB communications

Applications

- Fast, accurate single-mode fiber fault location using OTDR and VFL
- Single-mode optical network characterization using OTDR
- Single-mode loss testing using integrated source & power meter

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contact for specific part number and ordering information.</td>
</tr>
</tbody>
</table>
FTB-1 Platform

Features

- Connects anywhere: USB, 3G, WiFi, VPN, and Bluetooth.
- Loaded with utilities: all the tools required to maximize field testing, plus third-party applications.
- Like a PC: Intel processor with Windows Embedded Standard operating system.
- EXFO Connect-compatible: automated asset management; data goes through the cloud and into a dynamic database.
- GPS capabilities: accurate coordinates under the same conditions as a regular satellite GPS receiver.

Part #
YN-FTB-1-X1-X2-X3-X4-X5-X6-X7-X8-X9

X1=Display
S1 = 1T active screen.
S2 = Outdoor-enhanced screen.

X2=Memory:
00 = 8 GB internal memory (flash).
XMEM = 16 GB internal memory (flash).

X3=Battery
00 = Standard rechargeable lithium-ion battery.
EXT = Extended-life rechargeable lithium-ion battery.

X4= WiFi/Bluetooth hardware option
00 = Without RF components.
RF = With RF capability (WiFi and Bluetooth).

X5= Power meter:
00 = Without power meter.
VFL1 = Visual fault locator only.
VPM2X = Visual fault locator; PM; GeX detector.
VPM2X-CWDM = CWDM wavelengths calibrated (from 1270 nm to 1610 nm).
VPM3 = Power meter; InGaAs detector.
VPM3-CWDM = Power meter; InGaAs detector; CWDM wavelengths calibrated (from 1270 to 1610 nm).

X6= Connector adapter
FOA-12 = Biconic.
FOA-14 = NEC D4; PC; SPC, UPC.
FOA-16 = SMA/905, SMA-906.
FOA-22 = SC/PC; FC/PC, FC/UPC, FC/APC.
FOA-28 = DIN 47256, DIN 47256/APC.
FOA-32 = ST; ST/PC, ST/UPC.
FOA-54 = SC; SC/PC, SC/UPC, SC/APC.
FOA-78 = Radiall EC FOA-96B = E-2000 E-2000/UPC.
FOA-98 = LC.
FOA-99 = MU.

X7= Inspection probe models
00 = Without inspection probe.
FP410B = Digital video inspection probe with triple magnification.
FP420B = Analysis digital video inspection probe with automated pass/fail analysis and triple magnification autotcentering.
FP430B = Analysis digital video inspection probe with automated focus and pass/fail analysis and triple magnification autotcentering.

X8= Inspection probe base tips
APC = Includes FIPT-400-U25MA and FIPT-400-SC-APC.
UPC = Includes FIPT-400-U25M and FIPT-400-FC-SC.

X9= Software option
00 = Without any software option.
IPT = Ping and traceroute functionalities.
Expert-VoIP = RTP-based call testing software application, including packet loss analysis, jitter measurement and complete voice quality metrics.
Expert-IP = IP/Ethernet test suite, with tests including FTP performance, HTTP availability, VLAN scan, LAN discovery, ping, traceroute, IP/Ethernet port statistics (license for a single platform).
Expert-SIP = SIP call signaling support.
Expert-SCCP = SCCP call signaling support.
FR2-PL = FastReporter 2 software for fiber characterization package.
FR2-PL-LB = FastReporter 2 software for fiber characterization package and iOLM loopback mode.
MaxTester 715B

Features
- Handy, lightweight, powerful, tablet-inspired design.
- 7-inch, outdoor-enhanced touchscreen — the biggest in the handheld industry.
- 12-hour autonomy.
- Dead zones: EDZ 1 m, ADZ 4 m.
- Dynamic range of 30/28/28 dB.
- Rugged design built for outside plant.
- iOLM-ready: intelligent and dynamic application that turns complex OTDR trace analysis into a one-touch task.

Part #
YN-MAX-FTB715-X1-X2-X3-X4-X5-X6-X7-X8-X9

X1 = Model
M1 = Last-mile OTDR, 1310/1550 nm (9/125 µm).
M2 = Last-mile OTDR, 1310/1550 nm and 1625 nm live port (9/125 µm).
M3 = Last-mile OTDR, 1310/1550/1625 nm (9/125 µm).

X2 = OTDR software options
OTDR = Enables OTDR application only.
iOLM = Enables the iOLM application only.
Oi = Enables OTDR and iOLM applications.

X3 = Connector
EA-EUI-28 = APC/DIN 47256.
EA-EUI-89 = APC/FC narrow key.
EA-EUI-98 = APC/1/2.

X4 = Connectivity
00 = Without RF components.
RF = With RF capability (WiFi and Bluetooth).

X5 = Power meter
00 = Without power meter.
PM2X = Power meter; GeX detector.
VPM2X = VFL and power meter; GeX detector.

X6 = Connector adapter
FOA-12 = Biconic.
FOA-14 = NEC D4: PC, SPC, UPC.
FOA-16 = SMA/905, SMA/906.
FOA-22 = FC/PC, FC/SPC, FC/UPC, FC/APC.
FOA-28 = DIN 47256, DIN 47256/FC.
FOA-32 = ST/ST/PC, ST/SPC, ST/UPC.
FOA-54 = SC: SC/PC, SC/SPC, SC/UPC, SC/APC.
FOA-78 = Radial EC.
FOA-90B = E-2000/FC.
FOA-99 = LC FOA-99 = MU.

X7 = Inspection probe model
FP410B = Digital video inspection probe triple magnification.
FP420B = Analysis digital video inspection probe automated pass/fail analysis triple magnification autocentering.
FP430B = Automated analysis digital video inspection probe automated focus automated pass/fail analysis triple magnification autocentering.

X8 = Inspection probe base tips
APC = Includes FIPT-400-U25MA and FIPT-400-SC-APC.
UPC = Includes FIPT-400-U25MA and FIPT-400-FC-SC.

X9 = Software options
00 = Without any software option.
SRC = Source through OTDR port.
MaxTester 730B
FTTx/MDU PON OTDR

Features
- Handy, lightweight, powerful, tablet-inspired design.
- 7-inch, outdoor-enhanced touchscreen – the biggest in the handheld industry.
- 12-hour autonomy.
- Dead zones: EDZ 0.8 m, ADZ 3.5 m.
- Dynamic range: 39/37/37 dB.
- Rugged design built for outside plant.
- iOLM-ready: intelligent and dynamic application that turns complex OTDR trace analysis into a one-touch task.

Part #
YN-MAX-730B-X1-X2-X3-X5-X6-X7-X8-X9

X1 = Model
M1 = FTTx/MDU PON, 1310/1550 nm (9/125 µm).
M2 = FTTx/MDU PON, 1310/1550 nm and 1625 nm live port (9/125 µm).
M3 = FTTx/MDU PON, 1310/1550/1625 nm (9/125 µm).

X2 = OTDR software options
OTDR = Enables OTDR application only.
iOLM = Enables the iOLM application only.
Oi = Enables OTDR and iOLM applications.

X3 = Connector
EA-EUI-28 = APC/DIN 47256.
EA-EUI-89 = APC/FC narrow key.
EA-EUI-91 = APC/SC.
EA-EUI-98 = APC/LC.

X4 = Connectivity:
00 = Without RF components.
RF = With RF capability (WiFi and Bluetooth).

X5 = Power meter:
00 = Without power meter.
PM2X = Power meter; GeX detector.
VPM2X = VFL and power meter; GeX detector.

X6 = Connector adapter
FOA-12 = Biconic.
FOA-14 = NEC D4; PC, SPC, UPC.
FOA-16 = SMA/905, SRA-906.
FOA-22 = FC/PC, FC/SPC, FC/UPC, FC/APC.
FOA-28 = DIN 47256, DIN 47256/PC.
FOA-32 = ST-ST/PC, ST/SPC, ST/UPC.
FOA-54 = SC, SC/SPC, SC/UPC, SC/APC.
FOA-78 = Radial FC.
FOA-96B = E-2000/AC.
FOA-98 = LC FOA-99 = MU.

X7 = Inspection probe model
FP410B = Digital video inspection probe triple magnification.
FP420B = Analysis digital video inspection probe automated pass/fail analysis triple magnification autocentering.
FP430B = Automated analysis digital video inspection probe automated focus automated pass/fail analysis triple magnification autocentering.

X8 = Inspection probe base tips:
APC = Includes FIPT-400-U25MA and FIPT-400-SC-APC.
UPC = Includes FIPT-400-U25M and FIPT-400-FC-SC.

X9 = Software options:
00 = Without any software option.
SRC = Source through OTDR port.
M710-Series Single-mode and Multimode OTDRs

**Features**

- Integrated OPM and VFL (650 nm).
- Inspection capable with the DFS1 FiberScope.
- Full Auto, Expert, and Real-time OTDR test modes.
- Automatic pass/fail analysis (TIA/ISO).
- Touch and Test™ user interface.
- Tool-free, switchable test port adapters.
- Bellcore (GR-196) SOR file format.
- Internal (1000s test results) and USB storage.
- More than 8 hours battery life or AC power.
- USB host and function ports.
- TRM™ reporting software.

<table>
<thead>
<tr>
<th>Part #</th>
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</tr>
</thead>
<tbody>
<tr>
<td>YN-M710-20X-01</td>
<td>1310/1550 nm 41/39 dB single-mode OTDR.</td>
</tr>
<tr>
<td>YN-M710-21X-01</td>
<td>1310/1550/1625 nm 41/39/39 dB single-mode OTDR.</td>
</tr>
<tr>
<td>YN-M710-40X-01</td>
<td>1310/1550 nm 44/42 dB single-mode OTDR.</td>
</tr>
<tr>
<td>YN-M710-24X-01</td>
<td>850/1300/1310/1550 nm 25/24/40/38 dB Quad OTDR.</td>
</tr>
</tbody>
</table>

Note: Must Specify UPC or APC polish at time of order.
Visual Fault Locators

**FLS-140**

**Features**
- Bright red laser at 655 nm.
- Pulsed and CW operation.
- 40 hours of operation (typical).
- Standard AAA alkaline batteries.
- Pocket-size pen-style design.
- 2.5 mm universal connector.
- Class 2.

<table>
<thead>
<tr>
<th>Part #</th>
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</tr>
</thead>
<tbody>
<tr>
<td>YF-FLS-140</td>
<td>Pocket-size visual fault locator.</td>
</tr>
</tbody>
</table>

**YJ-VFL-150**

**Features**
- Bright red laser at 650nm.
- 2.5mm and 1.25mm universal connector
- Class IIIa Laser Diode < 5mw

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YJ-VFL-150</td>
<td>The kit includes VFL-25 Visual Fault Locator and VFL-25125 Adapter.</td>
</tr>
</tbody>
</table>

**VFI2 Visual Fault Identifier**

VF22 “Red Lasers” are trouble shooting tools that help technicians quickly locate defects in single-mode or multimode fiber optic cable. The VFI2 universal connectors offer quick connection to single ferrule connectors such as FC, SC, ST, LC, MU, and more.

<table>
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<tr>
<th>Part #</th>
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</tr>
</thead>
<tbody>
<tr>
<td>YN-VFI2-00-0900PR</td>
<td>AFL Test and Measurement VFI2-00-0900PR - Universal 2.5 mm Interface.</td>
</tr>
<tr>
<td>YN-VF52-00-0900</td>
<td>AFL Test and Measurement VF52-00-0900 probe includes; display unit, 2.5 mm universal adapter tip, AC adapter, battery, user's guide and carrying case.</td>
</tr>
</tbody>
</table>

**HiLite Miniature Visual Fault Identifier**

HiLite is a source of visible red laser light that helps installers and fiber technicians quickly locate defects in single-mode or multimode fiber optic cable. HiLite includes universal connectors that offer quick connection to single ferrule connectors such as FC, SC, ST, LC, MU, and more.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN-VF13-00-0900PR</td>
<td>AFL Test and Measurement HiLite Compact Universal (ST, FC, SC) Visible Fault Identifier 650 nm.</td>
</tr>
<tr>
<td>YR-1700XL</td>
<td>Fiber optic Visual Fault Finder.</td>
</tr>
</tbody>
</table>
Fiber Identifiers

Optical Fiber Identifiers

Features
Unique optical head with two-position plunger for use with all fiber types. Built-in power meter calibrated for 250 µm bare fiber. Detects traffic, CW and 270, 330, 1000 and 2000 Hz tones. Indicates direction of transmissions.

Applications
• Live fiber detection avoids technician-induced outages.
• Fiber identification and tracing with CW or tones.
• Make core power measurements.
• For use with 250 µm, 900µm, ribbon, 2 mm and 3 mm.
• Jacketed fibers.

<table>
<thead>
<tr>
<th>Part #</th>
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</tr>
</thead>
<tbody>
<tr>
<td>YN-OFI200</td>
<td>AFL Test and Measurement OFI-200D Optical Fiber Identifier.</td>
</tr>
<tr>
<td>YN-OFI400</td>
<td>AFL Test and Measurement OFI-400 Optical Fiber Identifier.</td>
</tr>
</tbody>
</table>

LFD-200

Features
• No need to open fiber for identification.
• Hands-free operation via Hold button.
• Three interchangeable adapter heads.
• Extended range model: 23 to –50 dBm.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YE-LFD20-X1-X2</td>
<td>Live Fiber Detector.</td>
</tr>
</tbody>
</table>

X1 = Live fiber detector

- LFD-201 = Standard live fiber detector without core power reading display.
- LFD-202 = Live fiber detector with core power reading display (23 dBm to –50 dBm).
- LFD-202E = Core power reading display (23 dBm to –50 dBm).

X2 = Additional heads

- 00 = No additional heads.
- 01 = With 2 mm interchangeable head.
- 02 = With 1.6 mm interchangeable head.
- 03 = With 2 mm and 1.6 mm interchangeable heads.

LFD-250B

Features
• Induces minimal loss: ≤1 dB.
• Fail-safe detection and results.
• Detects if a fiber is active or not prior to maintenance.
• Locates a particular dark fiber using tone recognition (270 Hz, 1 kHz, 2 kHz).
• Identifies traffic direction on a live fiber.
• Displays the power transmitted through the fiber.
• Three times faster test time.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YE-250B</td>
<td>Live Fiber detector.</td>
</tr>
</tbody>
</table>
LFD-300B

Features

• Pinpoints a specific live fiber using EXFO’s FiberFinder™ functionality.
• Induces minimal loss: ≤1 dB.
• Locates a particular dark fiber using tone recognition (270 Hz, 1 kHz, 2 kHz).
• Three times faster test cycle.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YE-LFD300B</td>
<td>Live Fiber Identifier.</td>
</tr>
<tr>
<td>YE-TG-300B</td>
<td>YE-TG-300B.</td>
</tr>
<tr>
<td>YE-TK-FF</td>
<td>Fiber Finder Kit Including one TG-300B one LFD-300B and a soft carrying bag.</td>
</tr>
</tbody>
</table>

OFl-BIPM and OFl-BI Optical Fiber Identifiers

Features

• World class signal sensitivity
• Trigger lock, positive stop for optimum detection
• Integrated optical power meter option (-BIPM model only)
• 2.4” color touchscreen with backlight

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact</td>
<td>for specific part number and ordering information.</td>
</tr>
</tbody>
</table>
Tool Kits

Cable Prep Tool Kit
The cable preparation tool kit provides the basic tools required for indoor or outdoor fiber optic cable and closure/enclosure preparation. Make sure you have everything needed to strip, clean, and prepare cabling for splicing and termination.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>T-KCP</td>
<td>The Cable Prep Tool Kit includes:</td>
</tr>
<tr>
<td></td>
<td>• Fiber cable sheath stripper</td>
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<tr>
<td></td>
<td>• Cable knife</td>
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<tr>
<td></td>
<td>• Cable slitter</td>
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<tr>
<td></td>
<td>• Multisocket can wrench</td>
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<tr>
<td></td>
<td>• Cable cutters</td>
</tr>
<tr>
<td></td>
<td>• Kevlar shears with pouch</td>
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<tr>
<td></td>
<td>• Ideal buffer cutting tool</td>
</tr>
<tr>
<td></td>
<td>• Splicers' scissors</td>
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<tr>
<td></td>
<td>• Lineman pliers (8&quot;)</td>
</tr>
<tr>
<td></td>
<td>• Miller strippers</td>
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<tr>
<td></td>
<td>• Needle nose pliers (6&quot;)</td>
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<tr>
<td></td>
<td>• Phillips screwdriver</td>
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<tr>
<td></td>
<td>• Standard screwdriver</td>
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<tr>
<td></td>
<td>• Seam ripper</td>
</tr>
<tr>
<td></td>
<td>• Tape measure (12&quot;)</td>
</tr>
<tr>
<td></td>
<td>• Electrical tape – black</td>
</tr>
<tr>
<td></td>
<td>• Sharpie permanent marker – black</td>
</tr>
<tr>
<td></td>
<td>• Deluxe tool bag (16” x 12” x 9”)</td>
</tr>
</tbody>
</table>

Mechanical Splice and Emergency Restoration Kit
A specialized tool kit for loose tube outside plant applications where fiber optic cable damage has occurred and a quick repair kit is needed to support emergency restoration.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-KERM</td>
<td>The Mechanical Splice and Emergency Restoration Kit includes:</td>
</tr>
<tr>
<td></td>
<td>• Universal FibrLok™ assembly tool</td>
</tr>
<tr>
<td></td>
<td>• Universal FibrLok II cap-lifter tool</td>
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<tr>
<td></td>
<td>• Universal FibrLok ( pkg. of 6)</td>
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<tr>
<td></td>
<td>• Staple cleaver</td>
</tr>
<tr>
<td></td>
<td>• Fiber cable sheath stripper</td>
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<tr>
<td></td>
<td>• Cable knife</td>
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<tr>
<td></td>
<td>• Cable slitter</td>
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<tr>
<td></td>
<td>• Multisocket can wrench</td>
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<tr>
<td></td>
<td>• Cable cutters</td>
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<tr>
<td></td>
<td>• Kevlar™ shears with pouch</td>
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<tr>
<td></td>
<td>• Ideal buffer cutting tool</td>
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<tr>
<td></td>
<td>• Splicers' scissors</td>
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<tr>
<td></td>
<td>• Lineman pliers (8”)</td>
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<tr>
<td></td>
<td>• Miller strippers</td>
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<td></td>
<td>• Needle nose pliers (6&quot;)</td>
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<td></td>
<td>• Phillips screwdriver</td>
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<td></td>
<td>• Standard screwdriver</td>
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<td></td>
<td>• Seam ripper</td>
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<tr>
<td></td>
<td>• Tape measure (12&quot;)</td>
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<tr>
<td></td>
<td>• Electrical tape – black</td>
</tr>
<tr>
<td></td>
<td>• Sharpie permanent marker – black</td>
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<tr>
<td></td>
<td>• Deluxe tool bag (16” x 12” x 9”)</td>
</tr>
</tbody>
</table>

Master Splicer Tool Kit
An all-inclusive tool kit designed for cable and closure/enclosure preparation with specialized tools for mid-cable access and to prepare special optical cables such as OPGW, ADSS, MicroCable, and armored loose tube for splicing or termination.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-KMS</td>
<td>The Master Splicer Tool Kit includes:</td>
</tr>
<tr>
<td></td>
<td>• Small bolt cutters – OPGW strands (12”)</td>
</tr>
<tr>
<td></td>
<td>• Fiber cable sheath stripper</td>
</tr>
<tr>
<td></td>
<td>• Cable knife and scissors</td>
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<tr>
<td></td>
<td>• Multisocket can wrench</td>
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<tr>
<td></td>
<td>• Cable cutters</td>
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<tr>
<td></td>
<td>• Kevlar™ shears with pouch</td>
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<td></td>
<td>• Mini SST pipe cutter – 1/8” to 5/8”</td>
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<tr>
<td></td>
<td>• Ideal buffer cutting tool</td>
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<tr>
<td></td>
<td>• Joint pliers (8”)</td>
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<td></td>
<td>• Miller strippers</td>
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<tr>
<td></td>
<td>• MSAT mid-span access tool</td>
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<td></td>
<td>• Needle nose pliers (6”)</td>
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<tr>
<td></td>
<td>• Phillips screwdriver</td>
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<td></td>
<td>• Standard screwdriver</td>
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<td></td>
<td>• Seam ripper</td>
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<tr>
<td></td>
<td>• Tape measure (12”)</td>
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<tr>
<td></td>
<td>• Electrical tape – Six rolls – Black (not shown), blue, green, yellow, red, white</td>
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<tr>
<td></td>
<td>• Heat shrink gun</td>
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<td></td>
<td>• Sharpie permanent marker – black</td>
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<tr>
<td></td>
<td>• Heat shrink tubes (1/8”, 1/4”, 1/2”, 1”) – 6” pieces</td>
</tr>
<tr>
<td></td>
<td>• Deluxe tool bag (16” x 12” x 9”)</td>
</tr>
</tbody>
</table>

Ask us to customize a kit with the tools that you choose!
Staff Development Videos

For instances when classroom training is not an option, the Light Brigade has created professional-quality DVDs that together offer the equivalent of 20 hours of classroom training. This menu-driven series of DVDs incorporate high-quality video clips, animations and graphics to enhance the learning experience. Individually, they can be used as refresher training on key fiber topics or to provide more focus on a specific area of concern.

The content is unbiased and provides an international perspective, including film footage and standards. Peer review occurred during both the scripting and production phases.

For those who plan to use the DVDs as staff development tools, they are formatted for easy presentation either by selectable chapters or in continuous play mode. Each DVD includes a quiz in Microsoft® Word format to allow the viewer to test their knowledge. An instructor’s version with answers is available upon request.

### DVDs by Topic

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<tr>
<th>DVD Title</th>
<th>Theory</th>
<th>Fiber</th>
<th>Cable</th>
<th>Connectors</th>
<th>Splicing</th>
<th>Installation</th>
<th>Testing</th>
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<th>Components</th>
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<tr>
<td>Introduction to Fiber Optics</td>
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<td>OTDR Theory and Operation</td>
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<td>Test Equipment and Testing Fiber Optic Links</td>
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<td>Patch Panels, Splice Closures, and Pedestals</td>
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<td>Fiber Optic Safety</td>
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<td>High-speed Fiber Optic Systems</td>
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<tr>
<td>Staff Development DVDs — Entire Set</td>
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</tbody>
</table>

Our DVDs are under GSA contract.

Earn BICSI ITS CECs.
# Staff Development Videos

## Get the Entire Set!

Our set of Staff Development DVDs will help you to create your own in-house training program for you and your staff. These DVDs feature interactive menus that allow for unlimited review and refreshers on specific topics.

Each DVD includes a quiz in Microsoft® Word format to allow the viewer to test their knowledge. An instructor’s version with answers is available upon request.

More than 20 hours • Part W-6D-SET • $1200

Visit our YouTube channel to see the preview videos

## Contents

<table>
<thead>
<tr>
<th>Title</th>
<th>Duration</th>
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</thead>
<tbody>
<tr>
<td>Fundamentals of Fiber Optics</td>
<td>105 min</td>
</tr>
<tr>
<td>Fiber Optic Cable</td>
<td>106 min</td>
</tr>
<tr>
<td>OTDR Theory and Operation</td>
<td>86 min</td>
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<td>Fiber Optic Test Equipment and</td>
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<tr>
<td>Testing Fiber Optic Links</td>
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<tr>
<td>Fiber Optic Splicing</td>
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<td>Fiber Optic Patch Panels, Splice</td>
<td>105 min</td>
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<tr>
<td>Closures and Pedestals</td>
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<tr>
<td>Fiber Optic Connectors</td>
<td>118 min</td>
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<tr>
<td>Fiber Optic Active Devices</td>
<td>121 min</td>
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<tr>
<td>Fiber Optic Passive Devices</td>
<td>118 min</td>
</tr>
<tr>
<td>Fiber Optic System Design</td>
<td>112 min</td>
</tr>
<tr>
<td>Fiber Optic Safety</td>
<td>86 min</td>
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</tbody>
</table>

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### Fundamentals of Fiber Optics

This DVD provides the foundation for anyone involved with fiber optics. Learn about fiber theory, terminology, fiber manufacturing the types of fibers and how optical fibers link the world in today's voice, video, and data communication systems.

### Fiber Optic Cable

Outside plant, utility, and premises applications employ many different types of fiber optic cable. Learn about various cable types and structures, how cables are manufactured, how to prepare cable for splicing and termination, and how to read cable specifications.

### Fiber Optic Splicing

Low loss splicing is the cornerstone of optimal network performance. Learn about the various types of mechanical and fusion splicers and how each operate. Learn about the step by step procedures for preparing and cleaving fibers for splicing. For those involved in manufacturing one chapter address specialty splicers.

### Fiber Optic Active Devices

A fiber optic system cannot function without light sources, detectors, and optical amplifiers. Learn how these devices function and are integrated into transmission systems, and how different types of tests are performed.

### Fiber Optic Passive Devices

DWDM, FTx, and ROADM fiber optic systems incorporate an enormous amount of optical passive devices. Learn about the many types of passive devices from components to systems. This DVD explains how these unique products work and how they are integrated to increase network bandwidth and reliability.

### Fiber Optic System Design

Learn to design multimode or single-mode fiber optic systems. This DVD addresses loss budgets, bandwidth, dispersion, and system integration. Additional chapters discuss the design process, transmission, WDM, ROADM, and FTTH systems.

### Fiber Optic Safety

This DVD serves as a safety primer for anyone working with fiber optic systems, components, fibers, and chemicals, whether it is in a lab, on the manufacturing floor, or as an end user. Learn about laser types and safety standards including visual safety for optical light sources and amplifiers.

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**Buy the 12-DVD set and receive the High-speed Fiber Optic Systems DVD for free.**

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