Plug & Play™ Universal Systems

Plug & Play™ Universal Systems for Data Centers and Storage Area Networks (SANs)

Corning Plug & Play™ universal systems create a fiber optic tip-to-tip solution for data centers and storage area networks (SANs) consisting of housings, modules, panels, harnesses, trunks and jumpers.
Plug & Play™ Universal Systems

Features and Benefits

Universal wired modular system components
Enable moves, adds and changes (MACs) without polarity concerns; provide a simple migration path between two-fiber and parallel optics applications

Standard and low-loss components
Provide means of meeting increasingly stringent network performance requirements

Corning® ClearCurve® OM3 and OM4 fiber offers enhanced bend performance
Allows tighter cable routing without negatively impacting system performance

100G-ready performance
Ensures product will meet the requirements of 100G Ethernet applications

Parallel optics tested to a maximum skew of 0.75 nanoseconds
Ensures operation in high-data-rate Ethernet and InfiniBand applications

Reduced-diameter pulling grip
Enables deployment of the cables in a variety of ducts/ conduits sizes including MaxCell inner duct

High-density trunk cables
Allows for tighter trunk cable bends for slack storage and routing while maximizing space utilization in tray

100 percent round furcation legs
Eliminates preferential bend issues commonly associated with ribbon cables and furcation legs

Specifications

Connected Mated Pair

<table>
<thead>
<tr>
<th></th>
<th>Insertion Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OM1</td>
</tr>
<tr>
<td>LC Reverse Polarity</td>
<td>0.25 dB</td>
</tr>
<tr>
<td>Uniboot</td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>0.25 dB</td>
</tr>
<tr>
<td>MTP® Compatible</td>
<td>0.5 dB</td>
</tr>
<tr>
<td>Connector</td>
<td></td>
</tr>
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</table>

Modules/Harnesses

<table>
<thead>
<tr>
<th></th>
<th>Insertion Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OM1</td>
</tr>
<tr>
<td></td>
<td></td>
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</tbody>
</table>
## Modules/Harnesses

<table>
<thead>
<tr>
<th></th>
<th>LC Reverse Polarity Uniboot</th>
<th>SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion Loss</td>
<td>0.75 dB</td>
<td>0.75 dB</td>
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<tr>
<td></td>
<td>0.75 dB</td>
<td>0.75 dB</td>
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<tr>
<td></td>
<td>0.5 dB</td>
<td>0.5 dB</td>
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<tr>
<td></td>
<td>1.3 dB</td>
<td>1.3 dB</td>
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</table>

## Integrated Trunk

<table>
<thead>
<tr>
<th></th>
<th>Insertion Loss</th>
<th>OM1</th>
<th>OM3/OM4</th>
<th>OS2</th>
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<tr>
<td>LC Reverse Polarity Uniboot</td>
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<td>0.75 dB</td>
<td>1.3 dB</td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>0.75 dB</td>
<td>0.75 dB</td>
<td>1.3 dB</td>
<td></td>
</tr>
</tbody>
</table>
Rack-Mountable Pretium® Connector Housings

The rack-mountable Pretium® Connector Housings (PCH) are available in 1U, 2U and 4U sizes and mount in 19-in racks or cabinets. Combined with the modules, panels, harnesses, trunks and jumpers, they provide a tip-to-tip solution for your fiber optic network.

Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Height Unit</th>
<th>Dimensions (W x D x H)</th>
<th>Packaging Dimensions (W x D x H)</th>
<th>Shipping Weight</th>
<th>Number of Panels per Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCH-01U</td>
<td>1U</td>
<td>432 mm x 406 mm x 44.45 mm (17 in x 16 in x 1.75 in)</td>
<td>615.9 mm x 508 mm x 120.7 mm (24.25 in x 20 in x 4.75 in)</td>
<td>5 kg (11 lb)</td>
<td>2</td>
</tr>
<tr>
<td>PCH-M3-01U</td>
<td>1U</td>
<td>426.72 mm x 323.85 mm x 44.45 mm (16.8 in x 12.75 in x 1.75 in)</td>
<td>511.3 mm x 438.15 mm x 120.65 mm (20.13 in x 17.25 in x 4.75 in)</td>
<td>1.75 kg (3.85 lb)</td>
<td>3</td>
</tr>
</tbody>
</table>
## Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Height Unit</th>
<th>Dimensions (W x D x H)</th>
<th>Packaging Dimensions (W x D x H)</th>
<th>Shipping Weight</th>
<th>Number of Panels per Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCH-02U</td>
<td>2U</td>
<td>431.8 mm x 419.1 mm x 88.9 mm (17 in x 16.5 in x 3.5 in)</td>
<td>584.2 mm x 558.8 mm x 152.4 mm (23 in x 22 in x 6 in)</td>
<td>5.7 kg (12.6 lb)</td>
<td>4</td>
</tr>
<tr>
<td>PCH-04U</td>
<td>4U</td>
<td>431.8 mm x 406.4 mm x 177.8 mm (17 in x 16 in x 7 in)</td>
<td>562.1 mm x 482.6 mm x 279.4 mm (22.13 in x 19 in x 11 in)</td>
<td>7.5 kg (16.5 lb)</td>
<td>12</td>
</tr>
</tbody>
</table>
Pretium® Wall-Mountable Housings

Pretium® Wall-mountable Housings (PWH) are available in 1, 2, 4, 6 and 12 panel/module sizes. Combined with the modules, panels, harnesses, trunks and jumpers, they provide a tip-to-tip solution for your fiber optic network.

Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Dimensions (W x D x H)</th>
<th>Packaging Dimensions (W x D x H)</th>
<th>Shipping Weight</th>
<th>Number of Panels per Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPH-01P</td>
<td>160 mm x 139.7 mm x 50.8 mm (6.3 in x 5.5 in x 2 in)</td>
<td>196.85 mm x 171.45 mm x 54.10 mm (7.75 in x 6.75 in x 2.13 in)</td>
<td>0.5 kg (1 lb)</td>
<td>1</td>
</tr>
<tr>
<td>PWH-02P</td>
<td>444.5 mm x 101.6 mm x 238.76 mm (17.5 in x 4 in x 9.4 in)</td>
<td>543.05 mm x 387.35 mm x 234.95 mm (21.38 in x 15.25 in x 9.25 in)</td>
<td>5 kg (11 lb)</td>
<td>2</td>
</tr>
<tr>
<td>PWH-04P</td>
<td>533.4 mm x 134.62 mm x 365.76 mm (21 in x 5.3 in x 14.4 in)</td>
<td>685.8 mm x 596.9 mm x 342.9 mm (27 in x 23.5 in x 13.5 in)</td>
<td>10.4 kg (23 lb)</td>
<td>4</td>
</tr>
</tbody>
</table>
## Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Dimensions (W x D x H)</th>
<th>Packaging Dimensions (W x D x H)</th>
<th>Shipping Weight</th>
<th>Number of Panels per Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>PWH-06P</td>
<td>533.4 mm x 134.62 mm x 365.76 mm (21 in x 5.3 in x 14.4 in)</td>
<td>685.8 mm x 596.9 mm x 342.9 mm (27 in x 23.5 in x 13.5 in)</td>
<td>10.4 kg (23 lb)</td>
<td>6</td>
</tr>
<tr>
<td>PWH-12P</td>
<td>825.5 mm x 134.62 mm x 365.76 mm (32.5 in x 5.3 in x 14.4 in)</td>
<td>977.9 mm x 596.9 mm x 342.9 mm (38.5 in x 23.5 in x 13.5 in)</td>
<td>10.9 kg (24 lb)</td>
<td>12</td>
</tr>
</tbody>
</table>
## Modules

Plug & Play™ Modules provide the interface between the MTP® Connector on the trunk and the LC or SC duplex jumpers that will then connect directly to the electronics. The LC duplex adapters feature hinged VFL-compatible shutters that move up and out of the way when the connector is inserted. Specially designed indents in the shutters ensure that the end faces of the connectors are never touched. These shutters replace the standard dust caps that typically once removed are never replaced, allowing the interior end faces to become dirty and possibly damaged.

## Ordering Information

<table>
<thead>
<tr>
<th>C C H - U M</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Select fiber count.
- 12 = 12 fibers
- 24 = 24 fibers

2 Select adapters on front of module.
- **Shuttered LC Duplex**
  - 05 = Multimode (OM3/OM4)
  - 04 = Single-mode (OS2)
  - 18 = Single-mode (OS2) APC
- **SC Duplex (12-fiber maximum)**
  - 57 = Multimode (OM3/OM4)
  - 72 = Single-mode (OS2)
  - 66 = Single-mode (OS2) APC

3 Select pinned MTP Connector adapter on back of module.
- 70 = Standard-loss multimode (OM1/OM3/OM4)
- 93 = Low-loss multimode (OM3/OM4)
- 89 = Single-mode (OS2)

4 Select fiber type.
- K = Multimode (OM1)
- T = Multimode (OM3)
- Q = Multimode (OM4)
- G = Single-mode (OS2)

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1) In order to guarantee a low-loss system, use all low-loss components.
2) Low-loss available with SC duplex, LC duplex and MTP Connectors on OM3 and OM4 solutions only.
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MTP® Adapter Panels

Plug & Play™ MTP® Adapter Panels provide a simple interface to connect trunk harnesses to trunks, standard trunks to extender trunks or can facilitate the use of 40G electronics.

Ordering Information

<table>
<thead>
<tr>
<th>C C H - C P</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
</table>

1. Select fiber count.
   - 36 = 3 MTP adapters
   - 72 = 6 MTP adapters
   - 96 = 8 MTP adapters
   - E4 = 12 MTP adapters (144-fibers)

2. Select fiber type.
   - 69 = Multimode (OM1)
   - E3 = Multimode (OM3, OM4)
   - 90 = Single-mode (OS2)
Module Harnesses

The 12-fiber Plug & Play™ Module Harness is designed to create a cross-connect point near the electronics by enabling port replication. This cross-connection is possible with duplex LC or SC connectors to interface with the electronics and a MTP® Connector to connect into the back of a module. With port replication, your day-x after multiple MACs in front of the electronics looks the same as day one.

Ordering Information

1) In order to guarantee a low-loss system, use all low-loss components.
2) Low-loss available with SC duplex, LC duplex and MTP Connectors on OM3 and OM4 solutions only.
Trunk Harnesses

The 12-fiber Plug & Play™ Trunk Harnesses are designed to facilitate an interconnect point when the electronics are located in a separate area than the cross-connect or patching field. This interconnection is possible with duplex LC or SC connectors to interface with the electronics and a MTP® Connector to connect into a trunk.

Ordering Information

1. Select pinned MTP Connectors.
   - 70 = Standard-loss multimode (OM1/OM3/OM4)
   - 93 = Low-loss multimode (OM3/OM4)
   - 89 = Single-mode (OS2)

2. Select breakout connector type (continued).
   - SC Duplex
     - 57 = Multimode (OM1/OM3/OM4)
     - 72 = Single-mode (OS2)
     - 66 = Single-mode (OS2 APC)
   - LC Duplex
     - 05 = Multimode (OM1/OM3/OM4)
     - 04 = Single-mode (OS2)
     - 15 = Single-mode (OS2) APC

3. Select fiber type.
   - K = Multimode (OM1)
   - T = Multimode (OM3)
   - Q = Multimode (OM4)
   - R = Single-mode (OS2)

4. Select leg length in inches (leg OD is 2.0 mm; -0/+3 in).
   - J = 12 inches
   - K = 24 inches
   - L = 36 inches
   - M = 48 inches
   - N = 60 inches
   - P = 72 inches
   - Q = 79 inches
   - R = 96 inches

5. Select overall harness length (does not include leg length).

6. Select unit of measure.
   - M = Meters
   - F = Feet

1) In order to guarantee a low-loss system, use all low-loss components.
2) Low-loss available with SC duplex, LC duplex and MTP Connectors on OM3 and OM4 solutions only.
Plug & Play™ Universal Systems

Trunk Specifications

Approval and Listings

NFPA 262, National Electric Code® (NEC®), OFNP, CSA FT-6, ICEA S-83-596

Trunk Performance

EIA/TIA 568 C.3 – includes low/high temperature soak of -10/60°C, humidity testing at 90-95 percent at 40°C, connector durability (500 matings) and connector pull testing

Pulling Grip Performance

12-fiber trunks can be pulled up to 100 lbs using the pulling grip while 24- to 144-fiber trunks can be pulled up to 300 lbs using the pulling grip.

Mechanical Characteristics

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Nominal Outer Diameter</th>
<th>Pulling Grip Outer Diameter</th>
<th>Weight</th>
<th>Min. Bend Radius Installation</th>
<th>Min. Bend Radius Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-Armored Cable Specifications</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>5.5 mm ± 0.3 mm (0.22 in ± 0.01 in)</td>
<td>18.0 mm (0.7 in)</td>
<td>32 kg/km (21 lb/1000 ft)</td>
<td>82.5 mm (3.3 in)</td>
<td>27.5 mm (1.08 in)</td>
</tr>
<tr>
<td>24</td>
<td>7.7 mm ± 0.3 mm (0.30 in ± 0.01 in)</td>
<td>26 mm (1.0 in)</td>
<td>50 kg/km (34 lb/1000 ft)</td>
<td>115.5 mm (4.6 in)</td>
<td>38.5 mm (1.5 in)</td>
</tr>
<tr>
<td>48</td>
<td>8.5 mm ± 0.3 mm (0.33 in ± 0.01 in)</td>
<td>26 mm (1.0 in)</td>
<td>63 kg/km (42 lb/1000 ft)</td>
<td>127.5 mm (5.0 in)</td>
<td>42.5 mm (1.7 in)</td>
</tr>
<tr>
<td>72</td>
<td>10.5 mm ± 0.3 mm (0.41 in ± 0.01 in)</td>
<td>26 mm (1.0 in)</td>
<td>95 kg/km (64 lb/1000 ft)</td>
<td>157.5 mm (6.2 in)</td>
<td>52.5 mm (2.1 in)</td>
</tr>
<tr>
<td>96</td>
<td>11.9 mm ± 0.3 mm (0.47 in ± 0.01 in)</td>
<td>26 mm (1.0 in)</td>
<td>111 kg/km (74 lb/1000 ft)</td>
<td>178.5 mm (7.0 in)</td>
<td>59.5 mm (2.3 in)</td>
</tr>
<tr>
<td>144</td>
<td>12.5 mm ± 0.3 mm (0.49 in ± 0.01 in)</td>
<td>26 mm (1.0 in)</td>
<td>122 kg/km (82 lb/1000 ft)</td>
<td>187.5 mm (7.4 in)</td>
<td>62.5 mm (2.5 in)</td>
</tr>
</tbody>
</table>

| **Armored Cable Specifications** | | | | | |
| 12 - 48 | 17.3 mm (± 1.5 mm) (0.68 in (± 0.06 in)) | 44 mm (1.75 in) | 209 kg/km (140 lb/1000 ft) | 173 mm (6.8 in) | 260 mm (10.2 in) |
| 72 | 19.9 mm (± 1.5 mm) (0.78 in (± 0.06 in)) | 44 mm (1.75 in) | 273 kg/km (183 lb/1000 ft) | 199 mm (7.8 in) | 299 mm (11.8 in) |
| 96 | 23.2 mm (± 1.5 mm) (0.91 in (± 0.06 in)) | 76 mm (3 in) | 403 kg/km (270 lb/1000 ft) | 232.0 mm (9.1 in) | 348.0 mm (13.7 in) |
| 144 | 24.5 mm (± 1.5 mm) (0.96 in (± 0.06 in)) | 76 mm (3 in) | 439 kg/km (294 lb/1000 ft) | 245 mm (9.7 in) | 368 mm (14.5 in) |
## Trunk Shipping Information

### Non-Armored Trunks, Extender Trunks and Hybrid Trunks

<table>
<thead>
<tr>
<th>Packaging Method</th>
<th>Box E</th>
<th>Reel 1</th>
<th>Reel 2</th>
<th>Reel 3</th>
<th>Reel W</th>
<th>Reel Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging Material</td>
<td>Corrugated box</td>
<td>Plastic reel</td>
<td>Plastic reel</td>
<td>Plastic reel</td>
<td>Plywood reel</td>
<td>Plywood reel</td>
</tr>
<tr>
<td>Reel Diameter (in)</td>
<td>23.5</td>
<td>23.5</td>
<td>23.5</td>
<td>36</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>Reel Width (in)</td>
<td>5</td>
<td>12</td>
<td>18</td>
<td>32</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Box Dimensions (in)</td>
<td>21x21x3.3</td>
<td>26x25.5x7</td>
<td>26x25.5x14</td>
<td>26x25.5x20</td>
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<td>-</td>
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</table>

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Capacities (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>10-29</td>
</tr>
<tr>
<td>24</td>
<td>10-29</td>
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<tr>
<td>36</td>
<td>10-29</td>
</tr>
<tr>
<td>48</td>
<td>10-29</td>
</tr>
<tr>
<td>72</td>
<td>10-29</td>
</tr>
<tr>
<td>96</td>
<td>10-29</td>
</tr>
<tr>
<td>144</td>
<td>10-29</td>
</tr>
</tbody>
</table>

Note: Trunks under 30 ft are shipped in a cardboard box and not on a reel.

### Armored Trunks, Extender Trunks and Hybrid Trunks

<table>
<thead>
<tr>
<th>Packaging Method</th>
<th>Reel 1</th>
<th>Reel 2</th>
<th>Reel 3</th>
<th>Reel N</th>
<th>Reel Q</th>
<th>Reel T</th>
<th>Reel Z</th>
<th>Reel 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging Material</td>
<td>Plastic reel</td>
<td>Plastic reel</td>
<td>Plastic reel</td>
<td>Corrugated reel</td>
<td>Plywood reel</td>
<td>Plywood reel</td>
<td>Plywood reel</td>
<td>Plywood reel</td>
</tr>
<tr>
<td>Reel Diameter (in)</td>
<td>23.5</td>
<td>23.5</td>
<td>23.5</td>
<td>30</td>
<td>27</td>
<td>30</td>
<td>41</td>
<td>48</td>
</tr>
<tr>
<td>Reel Width (in)</td>
<td>5</td>
<td>12</td>
<td>18</td>
<td>7</td>
<td>36</td>
<td>16</td>
<td>32</td>
<td>36</td>
</tr>
<tr>
<td>Box Dimensions (in)</td>
<td>26x25.5x7</td>
<td>26x25.5x14</td>
<td>26x25.5x20</td>
<td>31x31.5x32</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Capacities (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>10-149</td>
</tr>
<tr>
<td>24</td>
<td>10-62</td>
</tr>
<tr>
<td>36</td>
<td>10-62</td>
</tr>
<tr>
<td>48</td>
<td>10-62</td>
</tr>
<tr>
<td>96</td>
<td>10-34</td>
</tr>
<tr>
<td>144</td>
<td>10-31</td>
</tr>
</tbody>
</table>

Note: Trunks under 30 ft are shipped in a cardboard box and not on a reel.
## Transmission Performance

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Multimode</th>
<th>Multimode</th>
<th>Multimode</th>
<th>Single-mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber Core Diameter (µm)</td>
<td>62.5</td>
<td>50</td>
<td>50</td>
<td>8.2</td>
</tr>
<tr>
<td>Fiber Category</td>
<td>OM1</td>
<td>OM3</td>
<td>OM4</td>
<td>OS2</td>
</tr>
<tr>
<td>Fiber Code</td>
<td>K</td>
<td>T</td>
<td>Q</td>
<td>G</td>
</tr>
<tr>
<td>Performance Option Code</td>
<td>30</td>
<td>80</td>
<td>90</td>
<td>01</td>
</tr>
<tr>
<td>Wavelengths (nm)</td>
<td>850/1300</td>
<td>850/1300</td>
<td>850/1300</td>
<td>1310/1383/1550</td>
</tr>
<tr>
<td>Maximum Attenuation (dB/km)</td>
<td>3.4/1.0</td>
<td>2.8/1.0</td>
<td>2.8/1.0</td>
<td>0.4/0.4/0.3</td>
</tr>
<tr>
<td>Serial 1 Gigabit Ethernet (m)</td>
<td>300/550</td>
<td>1000/600</td>
<td>1100/600</td>
<td>5000//-/</td>
</tr>
<tr>
<td>Serial 10 Gigabit Ethernet (m)</td>
<td>33/-</td>
<td>300/-</td>
<td>550/-</td>
<td>10000/-/40000</td>
</tr>
<tr>
<td>Min. Overfilled Launch (OFL) Bandwidth (MHz*km)</td>
<td>200/500</td>
<td>1500/500</td>
<td>3500/500</td>
<td>-</td>
</tr>
<tr>
<td>Minimum Effective Modal Bandwidth (EMB) (MHz*km)</td>
<td>220/-</td>
<td>2000/-</td>
<td>4700/-</td>
<td>-</td>
</tr>
<tr>
<td>Induced Attenuation @ 7.5 mm Radius (dB)</td>
<td>-</td>
<td>&lt; 0.2up to80</td>
<td>&lt; 0.2up to80</td>
<td>-</td>
</tr>
</tbody>
</table>

* ITU-T G.652 D compliant.
* Meets 0.75 ns optical skew when used in all Corning Plug and Play™/Pretium EDGE® systems solutions.
* Assumes 1.0 dB maximum total connector/splice loss.

Notes:
1) Improved attenuation and bandwidth options available.
2) Bend-insensitive single-mode fibers available on request.
3) 50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.
4) Contact a Corning Customer Care Representative for additional information.
Plug & Play™ Universal Systems

MTP® Trunks

Plug & Play™ Universal Systems MTP® Trunks provide the backbone of the Plug & Play System. With non-pinned MTP Connectors on both ends of the cable, these trunks are designed to interface with the Plug & Play Universal modules. All trunks are shipped with strain-relief clips that allow for the tool-less installation into both Pretium EDGE® and Plug & Play housings. These trunks conform to TIA-568 Type-B polarity.

Ordering Information

1. Select grip applications.
   A = Grip on first end only
   N = No grip

2. Select non-pinned MTP Connectors (end one or outside of reel).
   69 = 62.5 µm multimode (OM1)
   75 = 50 µm multimode (OM3/OM4)
   90 = Single-mode (OS2)

3. Select non-pinned MTP Connectors (end two or inside of reel).
   69 = 62.5 µm multimode (OM1)
   75 = 50 µm multimode (OM3/OM4)
   90 = Single-mode (OS2)

4. Select standard fiber count.
   12 = 12 fibers
   24 = 24 fibers
   36 = 36 fibers
   48 = 48 fibers
   72 = 72 fibers
   96 = 96 fibers
   E4 = 144 fibers

5. Select fiber type.
   K = 62.5 µm multimode (OM1)
   T = 50 µm multimode (OM3)
   Q = 50 µm multimode (OM4)
   G = Single-mode (OS2)

6. Select cable type.
   PN = Non-armored plenum
   AD = Armored plenum
   See Note 1.

7. Select leg length on end one or outside of reel.
   A = 24 in minimum stagger (+5/-0 in)
   B = 36 in minimum stagger (+5/-0 in)
   See Notes 2 and 3.

8. Select leg length on end two or inside of reel.
   A = 24 in minimum stagger (+5/-0 in)
   B = 36 in minimum stagger (+5/-0 in)
   See Notes 2 and 3.

9. Select cable length (measured from furcation to furcation).
   001-999

10. Select unit of measure.
    M = Meters
    F = Feet

1) Contact a Corning Customer Care Representative for non-standard indoor and outdoor cable offerings.
2) Furcation legs are color coded by fiber type: K = Orange; T and Q = Aqua; G = Yellow.
3) Furcation legs are staggered with the shortest stagger length noted as the minimum length.
4) Plug & Play Universal Systems CCH Modules contain fibers configured in the Universal Wiring Scheme and must be mated to Plug & Play Universal Systems MTP Connector trunks.
Extender Trunks

Plug & Play™ Universal Systems Extender Trunks are used to distribute portions, or all, of the fibers in a Plug & Play Universal Systems trunk to other areas in the infrastructure. For example, a high-fiber-count trunk can be deployed from a main distribution area (MDA) to a zone distribution area (ZDA). Lower-fiber-count extender trunks can then be utilized to distribute fiber from the ZDA into cabinets.

Ordering Information

1. Select grip applications.
   - A = Grip on first end only
   - N = No grip

2. Select pinned MTP Connectors (end one or outside of reel).
   - 70 = 62.5 μm multimode (OM1)
   - 93 = 50 μm multimode (OM3/OM4)
   - 89 = Single-mode (OS2)

3. Select non-pinned MTP Connectors (end two or inside of reel).
   - 69 = 62.5 μm multimode (OM1)
   - 75 = 50 μm multimode (OM3/OM4)
   - 90 = Single-mode (OS2)

4. Select standard fiber count.
   - 12 = 12 fibers
   - 24 = 24 fibers
   - 36 = 36 fibers
   - 48 = 48 fibers

5. Select fiber type.
   - K = 62.5 μm multimode (OM1)
   - T = 50 μm multimode (OM3)
   - Q = 50 μm multimode (OM4)
   - G = Single-mode (OS2)

6. Select cable type.
   - PN = Non-armored plenum
   - AD = Armored plenum

7. Select leg length on end one or outside of reel.
   - A = 24 in minimum stagger (+5/-0 in)
   - B = 36 in minimum stagger (+5/-0 in)
   - See Notes 3 and 4.

8. Select leg length on end two or inside of reel.
   - See options from Item 7.

9. Select cable length (measured from furcation to furcation).
   - 001-999

10. Select unit of measure.
    - M = Meters
    - F = Feet

1) Extender trunks have pinned MTP Connectors on one end and non-pinned MTP Connectors on the other end. Attempting to mate two pinned MTP Connectors or two nonpinned MTP Connectors will not produce the desired optical performance.
2) Contact a Corning Customer Care Representative for non-standard indoor and outdoor cable offerings.
3) Furcation legs are color coded by fiber type: K = Orange; T and Q = Aqua; G = Yellow.
4) Furcation legs are staggered with the shortest stagger length noted as the minimum length.
Hybrid Connector Trunks and Hybrid Extender Trunks

Plug & Play™ Universal Systems Hybrid Connector Trunks are terminated with MTP® Connectors on one end of the trunk and MT-RJ or SC connectors on the other end for applications requiring one end of the trunk to connect directly into system equipment or patch panels. Both Plug & Play Universal Systems trunks and extender trunks are available in hybrid connector options.

Ordering Information

1. Select grip applications.
   A = Grip on first end only
   N = No grip

2. Select non-pinned MTP Connectors (end one or outside of reel).
   69 = 62.5 μm multimode (OM1)
   75 = 50 μm multimode (OM3/OM4)
   90 = Single-mode (OS2)

3. Select the connector (end two or inside of reel).
   SC Duplex
   57 = Multimode
   72 = Single-mode, UPC
   See Note 4.

4. Select standard fiber count.
   12 = 12 fibers
   24 = 24 fibers
   36 = 36 fibers
   48 = 48 fibers

5. Select fiber type.
   K = 62.5 μm multimode (OM1)
   T = 50 μm multimode (OM3)
   Q = 50 μm multimode (OM4)
   G = Single-mode (OS2)

6. Select cable type.
   PN = Non-armored plenum
   AD = Armored plenum
   See Note 1.

7. Select leg length on end one or outside of reel.
   A = 24 in minimum stagger (+5/-0 in)
   B = 36 in minimum stagger (+5/-0 in)
   See Notes 2 and 3.

8. Select leg length on end two or inside of reel.
   2.0 mm OD Legs
   K = 24 in (-0/+3 in)
   L = 36 in (-0/+3 in standard construction)
   M = 48 in (-0/+3 in)
   N = 60 in (-0/+3 in)
   P = 72 in (-0/+3 in)
   See Note 2.

9. Select cable length (measured from furcation to furcation).
   001-999

10. Select unit of measure.
    M = Meters
    F = Feet

1) Contact a Corning Customer Care Representative for non-standard indoor and outdoor cable offerings.
2) Furcation legs are color coded by fiber type: K = Orange; T and Q = Aqua; G = Yellow.
3) Furcation legs are staggered with the shortest stagger length noted as the minimum length.
4) Hybrid trunks with LC connectors are available as part of the Pretium EDGE® Solution. See LAN-1141-EN
Hybrid Extender Trunks

Ordering Information

1) Hybrid universal extender trunks have pinned MTP Connectors on one end and single-fiber connectors on the other end. Alignment is achieved when mating a pinned MTP Connector to a non-pinned MTP Connector. Attempting to mate two pinned MTP Connectors or two non-pinned MTP Connectors will not produce the desired optical performance.

2) Contact a Corning Customer Care Representative for non-standard indoor and outdoor cable offerings.

3) Furcation legs are color coded by fiber type: K = Orange; T and Q = Aqua; G = Yellow.

4) Furcation legs are staggered with the shortest stagger length noted as the minimum length.

5) Hybrid extender trunks with LC connectors are available as part of the Pretium EDGE Solutions. See LAN-1141-EN

6) Select cable type.
   PN = Non-armored plenum
   AD = Armored plenum
   See Note 2.

7) Select leg length on end one or outside of reel.
   A = 24 in minimum stagger (+5/-0 in)
   B = 36 in minimum stagger (+5/-0 in)
   See Notes 3 and 4.

8) Select leg length on end two or inside of reel.
   2.0 mm OD legs
   K = 24 in (-0/+3 in)
   L = 36 in (-0/+3 in standard construction)
   M = 48 in (-0/+3 in)
   N = 60 in (-0/+3 in)
   P = 72 in (-0/+3 in)
   See Note 3.

9) Select cable length (measured from furcation to furcation).
   001-999

10) Select unit of measure.
    M = Meters
    F = Feet
Jumpers

Corning offers the most complete line of connectors and factory-terminated cables, including low-loss jumpers to meet or exceed all industry standards for reflectance and insertion loss.

Corning’s advanced, state-of-the-art manufacturing process ensures unsurpassed connector performance. Fibers and ferrules are thoroughly screened at the beginning of every process, assembled and polished in a carefully monitored and controlled process and tested to ensure the same outstanding quality in every connector.

Ordering Information

1 Select performance.
   E = Low-loss
   C = Standard loss
   Blank = Leave blank for OM1 and OS2
   See Note 1.

2 Select connector type for end one.
   05 = LC duplex, OM1, OM3, OM4
   57 = SC duplex, OM1, OM3, OM4
   04 = LC duplex UPC, OS2
   22 = LC duplex APC, OS2
   72 = SC duplex UPC, OS2
   44 = SC simplex APC, OS2

3 Select connector type for end two.
   05 = LC duplex, OM1, OM3, OM4
   57 = SC duplex, OM1, OM3, OM4
   04 = LC duplex UPC, OS2
   22 = LC duplex APC, OS2
   72 = SC duplex UPC, OS2
   44 = SC simplex APC, OS2

4 Select fiber type.
   K = 62.5 μm multimode, OM1
   T = 50 μm multimode, OM3
   Q = 50 μm multimode, OM4
   G = Single-mode, OS2

5 Select cable length.
   001 - 999

6 Select unit of measure.
   M = Meters
   F = Feet

1) In order to guarantee a low-loss system, use all low-loss components.
MTP® Jumpers

Pretium EDGE® MTP® Jumpers allow for the seamless migration to higher data rates for multimode systems in the data center when used in conjunction with our universal trunks. This jumper is based around pinned or non-pinned 12-fiber MTP Connectors. Pictured here are the three most common applications for this type of jumper to make ordering easier. All the jumpers listed have a TIA-568 Type-B polarity and are plenum rated.

Ordering Information

1) Always list lowest connector code first.
2) Other polarities are available.

1. Select first MTP Connector.
   75 = Non-pinned OM3/OM4
   93 = Pinned OM3/OM4
   89 = Pinned OS2
   90 = Non-pinned OS2

2. Select second MTP Connector.
   75 = Non-pinned OM3/OM4
   93 = Pinned OM3/OM4
   89 = Pinned OS2
   90 = Non-pinned OS2
   See Note 1.

3. Select fiber type.
   T = 50 μm multimode (OM3)
   Q = 50 μm multimode (OM4)
   G = Single-mode (OS2)

4. Select length in feet.
   001-999
Integrated Trunk Modules

Plug & Play™ Integrated Trunk Modules (ITMs) combine the features of the Plug & Play modules with a 12-fiber trunk to provide the interface between the MTP® Connectors on the trunk and the LC or SC duplex jumpers that will then connect directly into the electronics. The LC duplex adapters feature hinged VFL-compatible shutters that move up and out of the way when the connector is inserted. Specially designed indents in the shutters ensure that the end faces of the connectors are never touched. These shutters replace the standard dust caps that typically once removed are never replaced, allowing the interior end faces to become dirty and possibly damaged.

The ITM provides a quick and convenient method for deploying and/or redeploying optical connectivity. It is ideal for deployment from the ZDA to equipment cabinet(s). They are compatible with the following housings.

Ordering Information

<p>| I T M U - 1  2 - |</p>
<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select adapters on front of module.</td>
<td>Select MTP® Connector.</td>
<td>Select fiber type.</td>
<td>Select length in feet.</td>
</tr>
<tr>
<td><strong>Shuttered LC Duplex</strong></td>
<td>70 = Multimode, pinned</td>
<td>K = 62.5 μm multimode (OM1)</td>
<td>See Note 1</td>
</tr>
<tr>
<td>05 = Multimode (OM3, OM4)</td>
<td>69 = Multimode, non-pinned</td>
<td>T = 50 μm multimode (OM3)</td>
<td></td>
</tr>
<tr>
<td>04 = Single-mode (OS2)</td>
<td>89 = Single-mode, pinned</td>
<td>Q = 50 μm multimode (OM4)</td>
<td></td>
</tr>
<tr>
<td><strong>SC Duplex</strong></td>
<td>90 = Single-mode, non-pinned</td>
<td>G = Single-mode (OS2)</td>
<td></td>
</tr>
<tr>
<td>57 = Multimode (OM3, OM4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>72 = Single-mode (OS2)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All ITMs have 40 ft of trunk cable stored inside the ITM, and the remaining cable is stored outside of the ITM.
## Housing Accessories

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Product Description</th>
<th>Units per Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>RBC-02P</td>
<td>Plug &amp; Play™ Systems Accessory Bracket, frame-mountable, holds 2 CCH Connector Panels or Modules</td>
<td>1/1</td>
</tr>
<tr>
<td>PC1-BKT-23</td>
<td>Pretium EDGE® Extension and Flush Mount Bracket for mounting 1U housings into 23-in racks or cabinets</td>
<td>1/1</td>
</tr>
<tr>
<td>PC2-BKT-23</td>
<td>Pretium EDGE® Extension and Flush Mount Bracket for mounting 2U housings into 23-in racks or cabinets</td>
<td>1/1</td>
</tr>
<tr>
<td>PC4-BKT-23</td>
<td>Pretium EDGE® Solutions Mounting Bracket for mounting 4U housings into 23-in racks or cabinets</td>
<td>1/1</td>
</tr>
<tr>
<td>PC1-BKT-FLSH</td>
<td>PCH Flush-mount Brackets, PCH-01U (one set)</td>
<td>1/1</td>
</tr>
<tr>
<td>PC2-BKT-FLSH</td>
<td>PCH Flush-mount Brackets for PCH-02U (one set)</td>
<td>1/1</td>
</tr>
<tr>
<td>PC4-BKT-FLSH</td>
<td>PCH Flush-mount Brackets PCH-04U (one set)</td>
<td>1/1</td>
</tr>
<tr>
<td>PC1-LOCK-KIT</td>
<td>Door Lock Kit; can be installed on the front and/or back door(s) of the PCH-01U; comes with one lock and two keys</td>
<td>1/1</td>
</tr>
<tr>
<td>HDWR-LOCK-KIT</td>
<td>Lock Kit for front door of housing; contains one lock with two keys</td>
<td>1/1</td>
</tr>
</tbody>
</table>
## Housing Accessories

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Product Description</th>
<th>Units per Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJP-01U-P</td>
<td>Pretium® Jumper Management Panel 1U; provides jumper management in a 1.75-in rack space</td>
<td>1/1</td>
</tr>
<tr>
<td>CJP-02U-P</td>
<td>Pretium® Jumper Management Panel 2U; provides jumper management in a 3.5-in rack space</td>
<td>1/1</td>
</tr>
<tr>
<td>PC2-STRN</td>
<td>PCH Strain-relief Bracket; PCH-02U accepts up to two UCC kits (UCC-001)</td>
<td>1/1</td>
</tr>
<tr>
<td>PC4-RJ-PLT</td>
<td>PCH 4U Strain-relief Rear Plate, dark metallic grey, for U-clip mounting</td>
<td>1/1</td>
</tr>
<tr>
<td>CDF-RJ-BKT</td>
<td>CDF Frame-Mount Bracket for 1 U-clip</td>
<td>1/1</td>
</tr>
<tr>
<td>CDF-RJ12-BKT</td>
<td>U-Clip Strain-relief Bracket, Plug &amp; Play™ Systems, frame-mountable, 12 in, for 12 U-clips</td>
<td>1/1</td>
</tr>
<tr>
<td>CDF-RJ18-BKT</td>
<td>U-Clip Strain-relief Bracket, Plug &amp; Play™ Systems, frame-mountable, 18 in, for 18 U-clips</td>
<td>1/1</td>
</tr>
<tr>
<td>EDGE-BKT-WT-2RU</td>
<td>Wire Tray Mounting Bracket for up to 2U of housing mounting space</td>
<td>1/1</td>
</tr>
<tr>
<td>EDGE-BKT-WT-4RU</td>
<td>Wire Tray Mounting Bracket for up to 4U of housing mounting space</td>
<td>1/1</td>
</tr>
<tr>
<td>EDGE-BKT-LR-2RU</td>
<td>Ladder Rack Mounting Bracket for up to 2U of housing mounting space</td>
<td>1/1</td>
</tr>
<tr>
<td>EDGE-BKT-LR-4RU</td>
<td>Ladder Rack Mounting Bracket for up to 4U of housing mounting space</td>
<td>1/1</td>
</tr>
</tbody>
</table>
## Cleaning Accessories

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Product Description</th>
<th>Units per Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLEANER-PORT-LC</td>
<td>Single-fiber Port Cleaner for LC, keyed LC and MU connector end faces for both UPC and APC polishes</td>
<td>1/1</td>
</tr>
<tr>
<td>2104466-01</td>
<td>Fiber Optic Cleaning Tool used to clean MTP® Connector end faces as well as MTP Connectors installed in a module</td>
<td>1/1</td>
</tr>
</tbody>
</table>