High-Speed Fiber Cabling Systems
Panduit provides high bandwidth and mission-critical physical infrastructures in data center, enterprise, and campus networks with comprehensive fiber optic systems that deliver high performance, reliability, and scalability. The deployment of high-speed cabling systems has been increasing rapidly as data centers enable their physical infrastructure with 10 Gb/s capacity to support server virtualization, I/O consolidation, and convergence of backbone applications.

Structured Cabling Infrastructure
A properly designed and implemented cabling infrastructure is a fundamental asset of every business. Carefully planning a structured cabling solution facilitates the delivery of new services, lowers network maintenance costs, and increases productivity. New high-bandwidth applications enable organizations to better fulfill their need for productivity and innovation in a rapidly changing world.

Innovative Data Center Infrastructure Solutions
Panduit provides a comprehensive, intelligent data center offering that supports best practice methodologies. Our data center solutions enable physical to logical architecture integration, and deliver robust, scalable physical infrastructures that address:

- Visibility and control for managing and automating real-time data processes and documentation
- Convergence of new technologies and high-speed data applications
- Operational efficiency through process improvement and IT initiatives, such as cooling conservation through energy efficient data cabinets
- Capacity management for greater real estate utilization
- Modular pods designed to support high-density applications and provide consistent, reliable deployments while lowering infrastructure risk and costs

Panduit's intelligent data center solutions facilitate faster implementation and simple specification, streamlining the process of designing, specifying, installing, and managing the increasingly complex physical infrastructure necessary to optimize your data center. Panduit knows the data center space intimately. We help you discover tangible infrastructure and business process improvements that increase functionality, interoperability, and manageability of mission-critical operations across your entire organization.

High Speed Data Transport Solutions
High Speed Data Transport (HSDT) Solutions are a set of complementary copper and optical fiber technologies for mission critical data center applications, spanning storage and compute requirements and leading edge architectures. Based on an understanding of today's vital business and technology challenges and how they impact data centers, Panduit has created best-in-class physical infrastructure solutions for HSDT. Panduit provides the broadest offering of end-to-end HSDT solutions supporting all data center architectures. Designed for high-density/high-speed applications, Panduit HSDT solutions are backed by comprehensive research and development programs to ensure high network performance, systems reliability, energy efficiencies, and seamless integration.

PanNet® System Warranty
All Panduit channels are field tested by Panduit Certified Installers (PCI) using industry standard hand-held devices which provide verified network performance, and ensures your network operates at optimal performance.
Cable Fire Ratings Reference Guide
Cable fire ratings need to be considered when specifying cabling infrastructure to ensure local building codes are met. The below rating guide provides the information needed to determine which rating is appropriate for different installation environments.

Plenum Rated Cable (OFNP)
A Plenum Rating (OFNP) signifies cable that has passed stringent burn testing and is suitable for installation into air plenum spaces. OFNP cables have fire-resistance and low smoke production characteristics. They can be installed in ducts, plenums, and other spaces used for building airflow. This is the highest fire rating fiber cable and no other cable types can be used as substitutes.

Plenum Rated Cable (OFCP)
A Plenum Rating (OFCP) differs from OFNP in that the cable contains metallic elements, typically armor, and therefore, conducts electricity. All other aspects of this rating are the same as OFNP.

Riser Rated Cable (OFNR)
A Riser Rating (OFNR) is commonly required when cables are run between floors through open vertical shafts. OFNR cables are used in Riser areas which are building vertical shafts or runs from one floor to another floor. OFNR cables cannot be installed in plenum areas since they do not have the required smoke rating as plenum rated cables. OFNP plenum cables can be used as substitutes for OFNR Riser cables.

Riser Rated Cable (OFCR)
A Riser Rating (OFCR) differs from OFNR in that the cable contains metallic elements, such as a layer of armor, and therefore, conducts electricity. All other aspects of this rating are the same as OFNR.

Low Smoke Zero Halogen (LSZH)
A Low Smoke Zero Halogen Rating (LSZH) is sometimes referred to as low toxicity cable. When burned, PVC-based cables produce a cloud of toxic smoke containing corrosive compounds such as hydrochloric acid. The LSZH cables do not contain the Halogen type compounds that form these toxic substances. Smoke emitted from burning LSZH cables do not produce the toxic halogen-based gasses previously mentioned. LSZH ratings are expressed as OFN-LS or OFNR-LS if the cable also meets the requirements of a OFNR rated cable.

Non-Flame Rated
Outside Plant (OSP) cables are intended for outdoor use only. Typically, these cables are constructed using varying densities of Polyethylene, (PE) in the outer jacket, and perhaps in other OSP cable components. Because cables without flame ratings do not contain flame suppressants and emit noxious gasses when burned, building codes often restrict the distance installers are permitted to route inside buildings before termination.
**Opti-Core® Interconnect Cable**

Used in interconnect, horizontal installations, routing in tight spaces such as panels, cable trays, and fiber-to-the-desk (FTTD) applications.

**Character**

<table>
<thead>
<tr>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<tr>
<td>F</td>
</tr>
</tbody>
</table>

1 and 2 – Fiber Product
- FS = Fiber – OM1, OM2, OS2
- FO = Fiber – OM3, OM4

3 – Cable Construction
- I = Interconnect cable

4 – Flame Rating
- P = Plenum
- R = Riser

5 – Fiber Type
- 9 = OS2 9/125µm
- 6 = OM1 6.25/125µm
- 5 = OM2 50/125µm
- X = OM3 10G 50/125µm
- Z = OM4 10G 50/125µm

6 and 7 – Fiber Count
- 02 = 2-fiber
- 06 = 6-fiber
- 12 = 12-fiber
- 24 = 24-fiber
- 36 = 36-fiber
- 48 = 48-fiber
- 72 = 72-fiber

8 – RoHS
- Y = RoHS compliant

---

**Opti-Core® Indoor Distribution Cable**

For indoor use in intra-building backbone and horizontal installations.

**Character**

<table>
<thead>
<tr>
<th>Example</th>
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<tbody>
<tr>
<td>1</td>
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<tr>
<td>F</td>
</tr>
</tbody>
</table>

1 and 2 – Fiber Product
- FS = Fiber – OM1, OM2, OS2
- FO = Fiber – OM3, OM4

3 – Cable Construction
- D = Distribution cable

4 – Flame/Smoke Rating
- R = Riser (OFNR)
- P = Plenum (OFNP)

5 – Fiber Type
- 9 = OS2 9/125µm
- 6 = OM1 6.25/125µm
- 5 = OM2 50/125µm
- X = OM3 10G 50/125µm
- Z = OM4 10G 50/125µm

6 and 7 – Fiber Count
- 06 = 6-fiber
- 12 = 12-fiber
- 24 = 24-fiber
- 36 = 36-fiber
- 48 = 48-fiber
- 72 = 72-fiber

8 – RoHS
- Y = RoHS compliant

---

Visit www.panduit.com for more information.
Opti-Core® Indoor/Outdoor All-Dielectric Cable with Tight Buffered Fibers

These cables provide an effective solution for inter-building and building transition applications.

Character Example
1 2 3 4 5 6 7
Example 1 2 3 4 5 6 7
1 and 2 – Fiber Product
FS = Fiber – OM1, OM2, OS2
FO = Fiber – OM3, OM4
3 – Cable Construction
K = Indoor/outdoor tight buffered unarmored
4 – Flame/Smoke Rating
R = Riser
P = Plenum
5 – Fiber Type
9 = OS2 9/125µm
6 = OM1 6.25/125µm
5 = OM2 50/125µm
X = OM3 10G 50/125µm
Z = OM4 10G 50/125µm
6 and 7 – Fiber Count
02 = 2-fiber
04 = 4-fiber
06 = 6-fiber
08 = 8-fiber
12 = 12-fiber
24 = 24-fiber
36 = 36-fiber
48 = 48-fiber
72 = 72-fiber
96 = 96-fiber
1A = 144-fiber (Riser only)

Opti-Core® Indoor/Outdoor All-Dielectric Cable

Allows installation using loose tube cable methods within buildings and outdoor environments for transitional aerial, duct applications, and entrance facilities.

Character Example
1 2 3 4 5 6 7 8
Example 1 2 3 4 5 6 7 8
1 and 2 – Fiber Product
FS = Fiber – OM1, OM2, OS2
FO = Fiber – OM3, OM4
3 – Cable Construction
C = Indoor/outdoor central tube (up to 12 fibers)
N = Indoor/outdoor stranded tube (24 fibers and greater)
4 – Flame Rating
R = Riser
P = Plenum
5 – Fiber Type
9 = OS2 9/125µm
6 = OM1 6.25/125µm
5 = OM2 50/125µm
X = OM3 10G 50/125µm
Z = OM4 10G 50/125µm
6 and 7 – Fiber Count
06 = 6-fiber
12 = 12-fiber
24 = 24 fiber
36 = 36 fiber
48 = 48 fiber
72 = 72 fiber
96 = 96 fiber
1A = 144 fiber
8 – RoHS
Y = RoHS compliant
Opti-Core® Indoor/Outdoor Interlocking Armored Cable with Tight Buffered Fibers
For use indoors and outdoors. Interlocking aluminum armor eliminates the need for inner duct or conduit.
Opti-Core® Indoor/Outdoor Interlocking Armored Cable

For use indoor and outdoors. Central loose tube constructions. Interlocking aluminum armor eliminates the need for inner duct or conduit.

**Character**

<table>
<thead>
<tr>
<th>Example</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber Product</td>
<td>F</td>
<td>S</td>
<td>G</td>
<td>P</td>
<td>5</td>
<td>0</td>
<td>6</td>
<td>Y</td>
</tr>
<tr>
<td>Fiber Product</td>
<td>FS = Fiber – OM1, OM2, OS2</td>
<td>FO = Fiber – OM3, OM4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cable Construction</td>
<td>G = Indoor/outdoor interlocking armored central tube (up to 12 fibers)</td>
<td>M = Indoor/outdoor interlocking armored stranded tube (24 fibers and greater)</td>
<td>L = Indoor/outdoor tight buffered</td>
<td>P = Indoor interlocking armored</td>
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<tr>
<td>Flame Rating</td>
<td>4 = Flame Rating</td>
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<tr>
<td>Flame Rating</td>
<td>R = Riser</td>
<td>P = Plenum</td>
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<tr>
<td>Fiber Type</td>
<td>5 = Fiber Type</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Fiber Type</td>
<td>9 = OS2 9/125µm</td>
<td>6 = OM1 62.5/125µm</td>
<td>5 = OM2 50/125µm</td>
<td>X = OM3 10G 50/125µm</td>
<td>Z = OM4 10G 50/125µm</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Fiber Count</td>
<td>6 and 7 = Fiber Count</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Fiber Count</td>
<td>02 = 2-fiber</td>
<td>04 = 4-fiber</td>
<td>06 = 6-fiber</td>
<td>08 = 8-fiber</td>
<td>12 = 12-fiber</td>
<td>24 = 24-fiber</td>
<td>36 = 36-fiber</td>
<td>48 = 48-fiber</td>
</tr>
<tr>
<td>RoHS</td>
<td>8 = RoHS</td>
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</tr>
<tr>
<td>RoHS</td>
<td>Y = RoHS compliant</td>
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</tbody>
</table>
Opti-Core® Dielectric Conduit Fiber (DCF) Optic Cable

For indoor use in intra-building backbone and horizontal installations.

Opti-Core® Gel-Free All-Dielectric Outside Plant Cable

For use outdoors in aerial and duct applications.

Character Example

1 and 2 – Fiber Product
FS = OM1, OM2, OS2
FO = OM3, OM4

3 – Cable Construction
A = Dielectric Conduit Distribution (indoor)
T = Outside plant stranded cable (all fiber counts)

4 – Flame/Smoke Rating
D = Dual rated riser (OFNR)
N = Non-rated

5 – Fiber Type
9 = OS2 9/125µm
6 = OM1 6.25/125µm
5 = OM2 50/125µm
X = OM3 10G 50/125µm
Z = OM4 10G 50/125µm

6 and 7 – Fiber Count
02 = 2-fiber
04 = 4-fiber
06 = 6-fiber
08 = 8-fiber
12 = 12-fiber

8 – Dash
9 and 10 – Jacket color
BL = Black

Character Example

1 and 2 – Fiber Product
FS = OM1, OM2, OS2
FO = OM3, OM4

3 – Cable Construction
T = Outside plant stranded cable (all fiber counts)

4 – Flame Rating
N = Non-rated

5 – Fiber Type
9 = OS2 9/125µm
6 = OM1 6.25/125µm
5 = OM2 50/125µm
X = OM3 10G 50/125µm
Z = OM4 10G 50/125µm

6 and 7 – Fiber Count
06 = 6-fiber
12 = 12-fiber
24 = 24-fiber
36 = 36-fiber
48 = 48-fiber
72 = 72-fiber
96 = 96-fiber
1A = 144-fiber

8 Visit www.panduit.com for more information.
**Opti-Core® Gel-Free Armored Outside Plant Cable**

Corrugated steel armor provides superior crush resistance for extended durability in direct burial applications.

<table>
<thead>
<tr>
<th>Character</th>
<th>Example</th>
<th>1 and 2 – Fiber Product</th>
<th>3 – Cable Construction</th>
<th>4 – Flame/Smoke Rating</th>
<th>5 – Fiber Type</th>
<th>6 and 7 – Fiber Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 and 2</td>
<td>F O</td>
<td>FS = Fiber – OM1, OM2, OS2</td>
<td>W = Outside plant armored stranded cable (all fiber counts)</td>
<td>N = Non-rated</td>
<td>9 = OS2 9/125µm</td>
<td>06 = 6-fiber</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FO = Fiber – OM3, OM4</td>
<td></td>
<td></td>
<td>6 = OM1 6.25/125µm</td>
<td>12 = 12-fiber</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>5 = OM2 50/125µm</td>
<td>24 = 24-fiber</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X = OM3 10G 50/125µm</td>
<td>36 = 36-fiber</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Z = OM4 10G 50/125µm</td>
<td>48 = 48-fiber</td>
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<td></td>
<td></td>
<td></td>
<td>72 = 72-fiber</td>
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<td></td>
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<td></td>
<td>96 = 96-fiber</td>
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<td></td>
<td>1A = 144-fiber</td>
</tr>
</tbody>
</table>
Opti-Core® Interconnect Cable

Used in interconnect, horizontal installations, and for routing in tight spaces such as panels, cable trays, and fibre-to-the-desk (FTTD) applications.

Character
Example
1 and 2 – Fibre Product
FP = Fibre – OM1, OM2, OS2
FQ = Fibre – OM3, OM4
3 – Cable Construction
I = Interconnect zip-cord cable
4 – Flame Rating
L = Low smoke zero halogen (LSZH)
5 – Fibre Type
9 = OS2 9/125µm
6 = OM1 62.5/125µm
5 = OM2 50/125µm
X = OM3 10G 50/125µm
Z = OM4 10G 50/125µm
6 and 7 – Fibre Count
02 = 2-fibre

Opti-Core® Indoor Distribution Cable

For indoor use in intrabuilding backbone and horizontal installations.

Character
Example
1 and 2 – Fibre Product
FP = Fibre – OM1, OM2, OS2
FQ = Fibre – OM3, OM4
3 – Cable Construction
D = Distribution cable
4 – Flame/Smoke Rating
L = Low smoke zero halogen (LSZH)
5 – Fibre Type
9 = OS2 9/125µm
6 = OM1 62.5/125µm
5 = OM2 50/125µm
X = OM3 10G 50/125µm
Z = OM4 10G 50/125µm
6 and 7 – Fibre Count
04 = 4-fibre
08 = 8-fibre
12 = 12-fibre
24 = 24-fibre
36 = 36-fibre
72 = 72-fibre

Visit www.panduit.com for more information.
**Opti-Core® Indoor/Outdoor All-Dielectric Cable with Tight Buffered Fibres**

For indoor and outdoor use.

<table>
<thead>
<tr>
<th>Character</th>
<th>Example</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 and 2 – Fibre Product</td>
<td>FP = Fibre – OM1, OM2, OS2</td>
<td>F</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 – Cable Construction</td>
<td>K = Indoor/outdoor tight buffered unarmored</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4 – Flame Rating</td>
<td>L = Low smoke zero halogen</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>5 – Fibre Type</td>
<td>9 = OS2 9/125µm</td>
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</tr>
<tr>
<td>6 and 7 – Fibre Count</td>
<td>02 = 2-fibre</td>
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</tbody>
</table>

**Opti-Core® Indoor/Outdoor All-Dielectric Cable**

For use indoor or outdoors. Central and stranded loose tube constructions are all-dielectric.

<table>
<thead>
<tr>
<th>Character</th>
<th>Example</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 and 2 – Fibre Product</td>
<td>FP = Fibre – OM1, OM2, OS2</td>
<td>F</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3 – Cable Construction</td>
<td>C = Indoor/outdoor central tube (up to 24 fibres)</td>
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<tr>
<td>N = Indoor/outdoor stranded tube (36 fibres and greater)</td>
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<td></td>
</tr>
<tr>
<td>4 – Flame Rating</td>
<td>L = Low smoke zero halogen (LSZH)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>5 – Fibre Type</td>
<td>9 = OS2 9/125µm</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>6 and 7 – Fibre Count</td>
<td>04 = 4-fibre</td>
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</tbody>
</table>

(Fibre Cable for EMEA (Europe, Middle East, and Africa))
Opti-Core® Dielectric Conduit (DCF) Fibre Optic Cable

For indoor use in intrabuilding backbone and horizontal installations.

Character | Example
--- | ---
1 and 2 – Fibre | 1 F 2 S
| FS= OM1, OM2, OS2
| FO= OM3, OM4
3– Cable Construction | 3 A 4 D 5 N 6 1 7 2 8 9 B 10 L
| A = Dielectric conduit distribution (indoor)
| 4 – Flame/Smoke Rating
| D = Dual rated riser (OFNR) and low smoke zero halogen (LSZH)
| 5 – Fibre Type
| 9 = OS2 9/125µm
| 6 = OM1 6.25/125µm
| 5 = OM2 50/125µm
| X = OM3 10G 50/125µm
| Z = OM4 10G 50/125µm
| 6 and 7 – Fibre Count
| 02 = 2-fibre
| 04 = 4-fibre
| 06 = 6-fibre
| 08 = 8-fibre
| 12 = 12-fibre
8 – Dash
9 and 10 – Jacket color
| BL = Black

Opti-Core® Gel-Filled All-Dielectric Outside Plant Cable

For use outdoors in aerial or duct applications. Stranded loose tube constructions are all-dielectric. No need to ground or bond.

Character | Example
--- | ---
1 and 2 – Fibre Product | 1 F 2 P 3 U 4 T 5 6 1 7 8 9 10
| FP = Fibre – OM1, OM2, OS2
| FQ = Fibre – OM3, OM4
3 – Cable Construction | 3 A 4 D 5 N 6 1 7 2 8 9 B 10 L
| U = Indoor/outdoor central tube (up to 24 fibres)
| T = Indoor/outdoor stranded tube (all fibre counts)
4 – Flame Rating
| N = Non-rated
5 – Fibre Type
| 9 = OS2 9/125µm
| 6 = OM1 6.25/125µm
| 5 = OM2 50/125µm
| X = OM3 10G 50/125µm
| Z = OM4 10G 50/125µm
6 and 7 – Fibre Count
| 06 = 6-fibre
| 08 = 8-fibre
| 12 = 12-fibre
| 24 = 24-fibre
| 36 = 36-fibre
| 48 = 48-fibre
| 72 = 72-fibre
| 96 = 96-fibre
| 1A = 144-fibre

Visit www.panduit.com for more information.
Opti-Core® Gel-Filled Single Armor Single Jacket Outside Plant Cable

For use outdoors in direct burial applications. Central loose tube constructions are armored with corrugated steel tape for greater crush resistance.

Character
Example

1 and 2 – Fibre Product
FP = Fibre – OM1, OM2, OS2
FQ = Fibre – OM3, OM4

3 – Cable Construction
S = Gel-filled single armor single jacket outside plant cable

4 – Flame Rating
N = Non-rated

5 – Fibre Type
9 = OS2 9/125µm
6 = OM1 62.5/125µm
5 = OM2 50/125µm
X = OM3 10G 50/125µm
Z = OM4 10G 50/125µm

6 and 7 – Fibre Count

Opti-Core® Gel-Filled Single Armor Double Jacket Outside Plant Cable

For use outdoors in direct burial applications. Stranded loose tube constructions are armored with corrugated steel tape for greater crush resistance.

Character
Example

1 and 2 – Fibre Product
FP = Fibre – OM1, OM2, OS2
FQ = Fibre – OM3, OM4

3 – Cable Construction
Q = Gel-filled single armor double jacket outside plant cable

4 – Flame Rating
N = Non rated

5 – Fibre Type
9 = OS2 9/125µm
6 = OM1 62.5/125µm
5 = OM2 50/125µm
X = OM3 10G 50/125µm
Z = OM4 10G 50/125µm

6 and 7 – Fibre Count

8 – Fibre Cable
B = Single armor double jacket stranded tube
# Fiber Cable for APAC (Asia Pacific)

## Opti-Core® Interconnect Cable

Used in interconnect, horizontal installations, routing in tight spaces such as panels, cable trays, and fiber-to-the-desk (FTTD) applications.

<table>
<thead>
<tr>
<th>Character</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 and 2  – Fiber Product</td>
<td>FL = Fiber – OS2, OM1, OM2, OM3, OM4</td>
</tr>
<tr>
<td>3  – Cable construction</td>
<td>I = Interconnect zipcord</td>
</tr>
<tr>
<td>4  – Flame/Smoke Rating</td>
<td>L = Low smoke zero halogen (LSZH)</td>
</tr>
</tbody>
</table>
| 5  – Fiber Type | 9 = OS2 9/125µm  
6 = OM1 62.5/125µm  
5 = OM2 50/125µm  
X = OM3 10G 50/125µm  
Z = OM4 10G 50/125µm |
| 6 and 7  – Fiber Count | 02 = 2-fiber  
04 = 4-fiber  
06 = 6-fiber  
08 = 8-fiber  
12 = 12-fiber  
24 = 24-fiber  
36 = 36-fiber  
48 = 48-fiber |
| 8  – RoHS | Y = RoHS compliant |

## Opti-Core® Indoor Distribution Cable

For indoor use in intrabuilding backbone and horizontal installations.

<table>
<thead>
<tr>
<th>Character</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 and 2  – Fiber Product</td>
<td>FL = Fiber – OS2, OM1, OM2, OM3, OM4</td>
</tr>
<tr>
<td>3  – Cable Construction</td>
<td>D = Distribution cable</td>
</tr>
<tr>
<td>4  – Flame/Smoke Rating</td>
<td>L = Low smoke zero halogen (LSZH)</td>
</tr>
</tbody>
</table>
| 5  – Fiber Type | 9 = OS2 9/125µm  
6 = OM1 62.5/125µm  
5 = OM2 50/125µm  
X = OM3 10G 50/125µm  
Z = OM4 10G 50/125µm |
| 6 and 7  – Fiber Count | 02 = 2-fiber  
04 = 4-fiber  
06 = 6-fiber  
08 = 8-fiber  
12 = 12-fiber  
24 = 24-fiber  
36 = 36-fiber  
48 = 48-fiber |
| 8  – RoHS | Y = RoHS compliant |
Opti-Core® Indoor/Outdoor All-Dielectric Cable with Tight Buffered Fibers
For use indoor and outdoors.

Character  Example
1  2  3  4  5  6  7
1 and 2 – Fiber Product
FL = Fiber – OM1, OM2, OS2, OM3, OM4
3 – Product Type
K = Indoor/outdoor tight buffered unarmored
4 – Flame/Smoke Rating
R = Riser (ONFR)
L = Low Smoke Zero halogen (LSZH)
5 – Fiber Type
9 = OS2 9/125µm
6 = OM1 62.5/125µm
5 = OM2 50/125µm
X = OM3 10G 50/125µm
Z = OM4 10G 50/125µm
6 and 7 – Fiber Count
04 = 4-fiber
06 = 6-fiber
08 = 8-fiber
12 = 12-fiber
16 = 16-fiber
24 = 24-fiber
48 = 48-fiber
72 = 72-fiber

Opti-Core® Indoor/Outdoor All-Dielectric Cable
For use indoor or outdoors. Central loose tube and stranded loose tube constructions are all-dielectric.

Character  Example
1  2  3  4  5  6  7  8
1 and 2 – Fiber Product
FL = Fiber – OM1, OM2, OS2, OM3, OM4
3 – Product Type
C = Indoor/outdoor central tube (up to 12 fibers)
N = Indoor/outdoor stranded tube (24 fibers and greater)
4 – Flame/Smoke Rating
R = Riser (OFNR)
L = Low smoke zero halogen (LSZH)
5 – Fiber Type
9 = OS2 9/125µm
6 = OM1 62.5/125µm
5 = OM2 50/125µm
X = OM3 10G 50/125µm
Z = OM4 10G 50/125µm
6 and 7 – Fiber Count
02 = 2-fiber
04 = 4-fiber
08 = 8-fiber
12 = 12-fiber
24 = 24-fiber
36 = 36-fiber
48 = 48-fiber
**Opti-Core® Dielectric Conduited (DCF) Fiber Optic Cable**

For indoor use in intrabuilding backbone and horizontal installations.

Character | Example
--- | ---
1 and 2 – Fiber Product | FS= OM1, OM2, OS2
FO= OM3, OM4
3 – Cable Construction | A = Dielectric conduited distribution (indoor)
4 – Flame/Smoke Rating | D = Dual rated riser (OFNR) and low smoke zero halogen (LSZH)
5 – Fiber Type | 9 = OS2 9/125 µm
6 = OM1 6.25/125µm
5 = OM2 50/125µm
X = OM3 10G 50/125µm
Z = OM4 10G 50/125µm
6 and 7 – Fiber Count | 02 = 2-fiber
04 = 4-fiber
06 = 6-fiber
08 = 8-fiber
12 = 12-fiber
8 – Dash | 9 and 10 – Jacket color
BL = Black

**Opti-Core® Gel-Filled All-Dielectric Outside Plant Cable**

For use outdoors in aerial or duct applications. Stranded constructions are all-dielectric. Gel-filled. Non-rated PE outer jacket.

Character | Example
--- | ---
1 and 2 – Fiber | FL = Fiber – OS2, OM1, OM2, OM3, OM4
3 – Cable Construction | T = Outside plant stranded cable (all fiber counts)
4 – Flame/Smoke Rating | N = Non-rated
5 – Fiber Type | 9 = OS2 9/125 µm
6 = OM1 6.25/125µm
5 = OM2 50/125µm
X = OM3 10G 50/125µm
Z = OM4 10G 50/125µm
6 and 7 – Fiber Count | 02 = 2-fiber
04 = 4-fiber
06 = 6-fiber
08 = 8-fiber
12 = 12-fiber
24 = 24-fiber
36 = 36-fiber
48 = 48-fiber
72 = 72-fiber
96 = 96-fiber
1A = 144-fiber

Visit www.panduit.com for more information.
**Opti-Core® Gel-Filled Armored Outside Plant Cable**

For use outdoors in direct burial applications. Stranded loose tube constructions are armored with corrugated steel tape for greater crush resistance. Gel-filled. Non-rated PE outer jacket.

---

**Character**

1 and 2 – Fiber Product  
FL = Fiber – OS2, OM1, OM2, OM3, OM4

3 – Cable Construction  
W = Outside plant armored stranded cable (all fiber counts)

4 – Flame/Smoke Rating  
N = Non-rated

5 – Fiber Type  
9 = OS2 9/125µm  
6 = OM1 62.5/125µm  
5 = OM2 50/125µm  
X = OM3 10G 50/125µm  
Z = OM4 10G 50/125µm

6 and 7 – Fiber Count  
02 = 2-fiber  
04 = 4-fiber  
06 = 6-fiber  
08 = 8-fiber  
12 = 12-fiber  
24 = 24-fiber  
36 = 36-fiber  
48 = 48-fiber  
72 = 72-fiber  
96 = 96-fiber  
1A = 144-fiber
**OptiCam® Pre-Polished Cam Fiber Optic Termination Kit**

- For termination of all Panduit OptiCam® Pre-Polished and Field Polish Connectors
- OptiCam® Termination Tool simplifies tooling and termination, and virtually eliminates operator error by providing visual indication of proper termination after the cam step has been completed
- No adhesive or electricity required for pre-polished termination
- Include installation instructions and stripping templates for all Panduit OptiCam® Pre-Polished Connectors; also available on www.panduit.com

**Field Polish Fiber Optic Termination Kit**

- Fast acting adhesive; no long curing epoxy required for field polish termination
- FIELDKIT provides consumable for terminating up to 200 field polish connectors
- Include installation instructions and stripping templates for all Panduit Field Polish Connectors; also available on www.panduit.com

**OptiCam® Pre-Polished and Field Polish Fiber Optic Connectors**

- TIA/EIA-604 FOCIS compatible connectors
- Exceed TIA/EIA-568-B.3 requirements
- Connector housing and boot colors follow TIA/EIA-568-C.3 suggested color identification scheme
- Non-optical disconnect maintains data transmission under tensile loads for jacketed cable
- Quick installation; provide field termination in less than half the time of field polish connectors
- Patented re-termination capability provides yield rates approaching 100%
- Factory pre-polished fiber endface eliminates time-consuming field polishing to reduce installation costs, labor, scrap and the number of tools required
- Cam activated fiber and buffer clamp mechanisms provide superior fiber and buffer retention – less sensitivity to fiber tensile loading
Opti-Cam® Pre-Polished Fiber Optic Connectors

LC OptiCam® Pre-Polished Fiber Optic Connectors

Quick installation - provides field termination in less than half the time of field polish connectors. Patented re-termination capability.

**Selection Information**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Connector Type</th>
<th>Ferrule Material</th>
<th>Fiber</th>
<th>Ferrule Finish</th>
<th>Backbone Color</th>
<th>Boot Color</th>
<th>Average Insertion Loss**</th>
<th>Return Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLCSCMXAQY</td>
<td>Simplex</td>
<td>Zirconia Ceramic</td>
<td>10 GbE 50/125µm (laser optimized) OM3/OM4</td>
<td>SPC</td>
<td>Aqua</td>
<td>Aqua</td>
<td>0.3dB</td>
<td>&gt;26dB</td>
</tr>
<tr>
<td>FLCDMCXAOY</td>
<td>Duplex</td>
<td>Zirconia Ceramic</td>
<td>50/125µm OM2</td>
<td>SPC</td>
<td>Black</td>
<td>Black</td>
<td>0.3dB</td>
<td>&gt;20dB</td>
</tr>
<tr>
<td>FLCSMC5BLY</td>
<td>Simplex</td>
<td>Zirconia Ceramic</td>
<td>62.5/125µm OM1</td>
<td>SPC</td>
<td>Electric Ivory</td>
<td>Black</td>
<td>0.3dB</td>
<td>&gt;20dB</td>
</tr>
<tr>
<td>FLCDMC6BLY</td>
<td>Duplex</td>
<td>Zirconia Ceramic</td>
<td>9/125µm OS1/OS2</td>
<td>UPC</td>
<td>Blue</td>
<td>Blue</td>
<td>0.3dB</td>
<td>&gt;50dB</td>
</tr>
</tbody>
</table>

*All connector insertion loss values calculated from tests taken with precision launch jumper assemblies per TIA/EIA-FOTP-171.

SC OptiCam® Pre-Polished Fiber Optic Connectors

**Selection Information**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Connector Type</th>
<th>Ferrule Material</th>
<th>Fiber</th>
<th>Ferrule Finish</th>
<th>Housing Color</th>
<th>Backbone Color</th>
<th>Boot Color</th>
<th>Average Insertion Loss**</th>
<th>Return Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSCMCMXAOQ</td>
<td>Simplex</td>
<td>Zirconia Ceramic</td>
<td>10 GbE 50/125µm (laser optimized) OM3/OM4</td>
<td>SPC</td>
<td>Black</td>
<td>Aqua</td>
<td>Aqua</td>
<td>0.3dB</td>
<td>&gt;26dB</td>
</tr>
<tr>
<td>FSCDMCMXAOQ</td>
<td>Duplex</td>
<td>Zirconia Ceramic</td>
<td>50/125µm OM2</td>
<td>SPC</td>
<td>Black</td>
<td>Black</td>
<td>Black</td>
<td>0.3dB</td>
<td>&gt;20dB</td>
</tr>
<tr>
<td>FSCMC5BLY</td>
<td>Simplex</td>
<td>Zirconia Ceramic</td>
<td>62.5/125µm OM1</td>
<td>SPC</td>
<td>Electric Ivory</td>
<td>Electric Ivory</td>
<td>Black</td>
<td>0.3dB</td>
<td>&gt;20dB</td>
</tr>
<tr>
<td>FSCSCBU</td>
<td>Simplex</td>
<td>Zirconia Ceramic</td>
<td>9/125µm OS1/OS2</td>
<td>UPC</td>
<td>Blue</td>
<td>Blue</td>
<td>Blue</td>
<td>0.3dB</td>
<td>&gt;50dB</td>
</tr>
</tbody>
</table>

**All connector insertion loss values calculated from tests taken with precision launch jumper assemblies per TIA/EIA-FOTP-171.
## Field Polished Fiber Optic Kit & Connectors

### ST OptiCam® Pre-Polished Fiber Optic Connectors

**Selection Information**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Connector Type</th>
<th>Ferrule Material</th>
<th>Fiber</th>
<th>Ferrule Finish</th>
<th>Backbone Color</th>
<th>Boot Color</th>
<th>Average Insertion Loss*</th>
<th>Return Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSTMCXAQ</td>
<td>Simplex</td>
<td>Zirconia Ceramic</td>
<td>10 GbE 50/125μm (laser optimized) OM3/OM4</td>
<td>SPC</td>
<td>Aqua</td>
<td>Aqua</td>
<td>0.3dB</td>
<td>&gt;26dB</td>
</tr>
<tr>
<td>FSTMC5BL</td>
<td>Simplex</td>
<td>Zirconia Ceramic</td>
<td>50/125μm OM2</td>
<td></td>
<td>Black</td>
<td>Black</td>
<td>0.3dB</td>
<td>&gt;20dB</td>
</tr>
<tr>
<td>FSTMC6BL</td>
<td>Simplex</td>
<td>Zirconia Ceramic</td>
<td>62.5/125μm OM1</td>
<td></td>
<td>Black</td>
<td>Black</td>
<td>0.3dB</td>
<td>&gt;20dB</td>
</tr>
<tr>
<td>FSTSCBU</td>
<td>Simplex</td>
<td>Zirconia Ceramic</td>
<td>9/125μm OS1/OS2</td>
<td>UPC</td>
<td>Blue</td>
<td>Blue</td>
<td>0.3dB</td>
<td>&gt;50dB</td>
</tr>
</tbody>
</table>

*All connector insertion loss values calculated from tests taken with precision launch jumper assemblies per TIA/EIA-FOTP-171.

### Field Polish Fiber Optic Connectors

**LC OptiCam® Field Polish Fiber Optic Connectors**

Non-optical disconnect maintains data transmission under tensile loads for jacketed cable. Tight buffered fiber cable type recommended.

**Selection Information**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Connector Type</th>
<th>Cable Type</th>
<th>Fiber</th>
<th>Ferrule</th>
<th>Housing Color</th>
<th>Boot Color</th>
<th>Average Insertion Loss*</th>
<th>Return Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSTMCXQA</td>
<td>Simplex</td>
<td>900μm buffered fiber and 1.6mm – 2.0mm jacketed cable</td>
<td>OM1 Multimode</td>
<td>Zirconia Ceramic</td>
<td>Electric Ivory</td>
<td>Electric Ivory</td>
<td>0.1dB</td>
<td>&gt;20</td>
</tr>
<tr>
<td>FSTMC5BL</td>
<td>Simplex</td>
<td>3.0mm jacketed cable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSTMC6BL</td>
<td>Simplex</td>
<td>1.6mm – 2.0mm jacketed cable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSTSCBU</td>
<td>Simplex</td>
<td>900μm buffered fiber</td>
<td>OM2, OM3, OM4 Multimode</td>
<td>Zirconia Ceramic</td>
<td>Black</td>
<td>Black</td>
<td>0.1dB</td>
<td>&gt;20</td>
</tr>
<tr>
<td>FSTMC3.0BL</td>
<td>Simplex</td>
<td>3.0mm jacketed cable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSTCMBLY</td>
<td>Simplex</td>
<td>1.6mm – 2.0mm jacketed cable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FLCDM3.0BL</td>
<td>Simplex</td>
<td>3.0mm jacketed cable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FLCDM900BLY</td>
<td>Simplex</td>
<td>900μm buffered fiber</td>
<td>OM2, OM3, OM4 Multimode</td>
<td>Zirconia Ceramic</td>
<td>Black</td>
<td>Black</td>
<td>0.1dB</td>
<td>&gt;20</td>
</tr>
</tbody>
</table>

*All connector insertion loss values calculated from tests taken with precision launch jumper assemblies per TIA/EIA-FOTP-171.
### SC OptiCam® Field Polish Fiber Optic Connectors

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Connector Type</th>
<th>Cable Type</th>
<th>Fiber</th>
<th>Ferrule</th>
<th>Housing Color</th>
<th>Boot Color</th>
<th>Average Insertion Loss*</th>
<th>Return Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSCM5BL</td>
<td>Simplex</td>
<td>900μm buffered fiber and 3.0mm jacketed cable</td>
<td>Multimode</td>
<td>Zirconia Ceramic</td>
<td>Black</td>
<td>Black</td>
<td>0.1dB (multimode)</td>
<td>&gt;20</td>
</tr>
<tr>
<td>FSCM2.05BL</td>
<td>Simplex</td>
<td>900 micron buffered fiber and 1.6 – 2.0mm jacketed cable</td>
<td>Multimode</td>
<td>Zirconia Ceramic</td>
<td>Electric Ivory</td>
<td>Red</td>
<td>0.1dB (multimode)</td>
<td>&gt;20</td>
</tr>
<tr>
<td>FSCDM5BL</td>
<td>Duplex</td>
<td>3.0mm jacketed cable</td>
<td>Singlemode</td>
<td>Zirconia Ceramic</td>
<td>Black</td>
<td>Blue</td>
<td>0.15dB</td>
<td>&gt;40</td>
</tr>
<tr>
<td>FSCM2.0RD</td>
<td>Simplex</td>
<td>900μm buffered fiber and 3.0mm jacketed cable</td>
<td>Multimode</td>
<td>Zirconia Ceramic</td>
<td>Red</td>
<td>Black</td>
<td>0.15dB (multimode)</td>
<td>&gt;20</td>
</tr>
<tr>
<td>FSCM2.0BL</td>
<td>Simplex</td>
<td>900μm buffered fiber and 1.6mm – 2.0mm jacketed cable</td>
<td>Multimode</td>
<td>Zirconia Ceramic</td>
<td>Red</td>
<td>Black</td>
<td>0.15dB (multimode)</td>
<td>&gt;20</td>
</tr>
<tr>
<td>FSCM2.0BU</td>
<td>Simplex</td>
<td>900μm buffered fiber and 3.0mm jacketed cable</td>
<td>Singlemode</td>
<td>Zirconia Ceramic</td>
<td>Blue</td>
<td>Blue</td>
<td>0.15dB</td>
<td>&gt;40</td>
</tr>
</tbody>
</table>

*All connector insertion loss values calculated from tests taken with precision launch jumper assemblies per TIA/EIA-FOTP-171.

### ST OptiCam® Field Polish Fiber Optic Connectors

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Connector Type</th>
<th>Ferrule Material</th>
<th>Fiber</th>
<th>Ferrule Finish</th>
<th>Housing Color</th>
<th>Backbone Color</th>
<th>Boot Color</th>
<th>Average Insertion Loss*</th>
<th>Return Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSTMABL</td>
<td>Simplex</td>
<td>Zirconia Ceramic</td>
<td>Multimode</td>
<td>UPC</td>
<td>Black</td>
<td>Nickel Plated Zinc</td>
<td>Black</td>
<td>0.15dB (multimode)</td>
<td>&gt;20dB (multimode)</td>
</tr>
<tr>
<td>FSTMARD</td>
<td>Simplex</td>
<td>Zirconia Ceramic</td>
<td>Multimode</td>
<td>UPC</td>
<td>Red</td>
<td>Nickel Plated Zinc</td>
<td>Red</td>
<td>0.15dB (multimode)</td>
<td>&gt;20dB (multimode)</td>
</tr>
<tr>
<td>FSTSABU</td>
<td>Simplex</td>
<td>Zirconia Ceramic</td>
<td>Singlemode</td>
<td>UPC</td>
<td>Blue</td>
<td>Nickel Plated Zinc</td>
<td>Blue</td>
<td>0.20dB (singlemode)</td>
<td>&gt;40dB (singlemode)</td>
</tr>
</tbody>
</table>

*All connector insertion loss values calculated from tests taken with precision launch jumper assemblies per TIA/EIA-FOTP-171.
**TIA 598-C**

The Telecommunications Industry Association’s TIA-598-C Optical Fiber Cable Color Coding, is an American National Standard, that provides all necessary information for color-coding optical fiber cables in a uniform manner. It defines identification schemes for fibers, buffered fibers, fiber units, and groups of fiber units within outside plant and premises optical fiber cables. This standard allows for fiber units to be identified by means of a printed legend. The legend will contain a corresponding printed numerical position number and/or color for use in identification.

### TIA-598-C Fiber Color Code Chart

<table>
<thead>
<tr>
<th></th>
<th>Color</th>
<th></th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Blue</td>
<td>13</td>
<td>Blue with black tracer</td>
</tr>
<tr>
<td>2</td>
<td>Orange</td>
<td>14</td>
<td>Orange with black tracer</td>
</tr>
<tr>
<td>3</td>
<td>Green</td>
<td>15</td>
<td>Green with black tracer</td>
</tr>
<tr>
<td>4</td>
<td>Brown</td>
<td>16</td>
<td>Brown with black tracer</td>
</tr>
<tr>
<td>5</td>
<td>Slate</td>
<td>17</td>
<td>Slate with black tracer</td>
</tr>
<tr>
<td>6</td>
<td>White</td>
<td>18</td>
<td>White with black tracer</td>
</tr>
<tr>
<td>7</td>
<td>Red</td>
<td>19</td>
<td>Red with black tracer</td>
</tr>
<tr>
<td>8</td>
<td>Black</td>
<td>20</td>
<td>Black with black tracer</td>
</tr>
<tr>
<td>9</td>
<td>Yellow</td>
<td>21</td>
<td>Yellow with black tracer</td>
</tr>
<tr>
<td>10</td>
<td>Violet</td>
<td>22</td>
<td>Violet with black tracer</td>
</tr>
<tr>
<td>11</td>
<td>Rose</td>
<td>23</td>
<td>Rose with black tracer</td>
</tr>
<tr>
<td>12</td>
<td>Aqua</td>
<td>24</td>
<td>Aqua with black tracer</td>
</tr>
</tbody>
</table>

Contact Customer Service for fiber cable minimum order quantities, lead times, and stocked availability.