



Copper and Fiber Systems Solutions

Welcome.

Our commitment to quality and customer service is our connection to you!

This is our quality statement and we live by it. NetSource partners with our clients to enhance networks with premier copper and fiber solutions. We are proud to have built our business and reputation on quality and customer satisfaction; your unique requirements and specifications are our priority.

We exceed industry testing standards to ensure that every cable solution performs optimally and delivers the strongest connection possible. Our thoroughly tested, end-to-end cable solutions are assembled with U.S. based labor and manufacturing partners for seamless and reliable connectivity.

At NetSource, we understand the expanding needs in today's interconnected world. We will work with you to provide both standardized and custom cable solutions to solve your technology and infrastructure challenges in this constantly evolving environment.

We leverage our 24-hour assembly capabilities across both copper and fiber optic cable solutions to ensure quick, quality assured connections for our partners.



Give us a call to learn more or place an order with one of our experienced NetSource sales representatives.

25 West Street
Bolton, CT 06043

1-800-557-8818
info@NetSource-inc.com

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SOURCE+

SOURCE+ is the intelligent choice for data centers and storage area network upgrades and installations.

SOURCE+ is designed to be user friendly and provides various cabling options utilizing MTP® cassettes and harnesses.

This end-to-end solution supports 10G and allows seamless migration to 40/100G platforms.

The SOURCE+ system provides a high density modular solution designed to maximize efficient use of rack space and simple installation.

SOURCE+ is suitable for any size project from simple upgrades to large enterprise build-outs.

Features & Benefits

Cost-effective

- Uses less rack space
- Less scrap and waste
- Reduces labor and installation time

Reliability

- Factory terminated and tested in a controlled environment
- Product consistency
- Built to customer specification
- Warrantied solution

Optimum Performance

- Standard and low loss options available
- Exceeds industry standards

NetSource offers multiple footprints and options to meet every need:

SOURCE+ SD series

The SD series fits your standard footprint
72F per RU

SOURCE+ HD series

The HD series is your high density footprint
96F per RU

SOURCE+ HD+ series

The HD+ series is for your most critical space applications
144F per RU

SOURCE+

We offer a variety of options to support 10/40/100G networks, guaranteeing the most cost-effective and future-proof network available for your particular design.

Consult your NetSource sales representative for products that allow easy migration to 40/100G.

**10G, Base-12
12 Fiber MTP®
Cable Assemblies
and Cassettes**

**40G, Base-8
4 Lanes @10 G/s
8 Fiber MTP®
Cable Assemblies**

**40G, Base-8
4 Lanes @10 G/s
8 Fiber Backbone
with Cassettes**

**100G, Base-24
10 Lanes @10 G/s
24 Fiber MTP®
Backbone**

10G Ports

Jumpers



12F or 24F
MTP®-LC Cassette



12F or 24F
Backbone Cable



12F or 24F
MTP®-LC Cassette



Jumpers



Active
Equipment

40G Ports

8F MTP®
Array Cable



MTP®
Adapter Panel



MTP®
Backbone Cable



MTP®
Adapter Panel



8F MTP®
Array Cable



Active
Equipment

40G Ports

Jumpers



BASE-8
MTP®-LC CASSETTES



MTP®
Backbone Cable



BASE-8 MTP®-LC
Cassettes



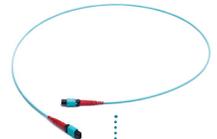
Jumpers



Active
Equipment

100G Ports

24F MTP®
Patch Cable



MTP®
Adapter Panel



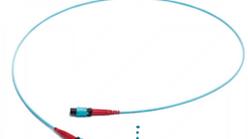
Backbone
Cable



MTP®
Adapter Panel



24F MTP®
Patch Cable



Active
Equipment

MTP® Patch and MTP® Trunk Cables

SOURCE+ MTP® Trunk, MTP® Patch, and MTP® Conversion assemblies are individual components that make up NetSource's end-to-end solution. The SOURCE+ MTP® trunks are the backbone of the network and interconnect to MTP® cassettes or adapter panels.

The MTP® patch cords cross connect the MTP® trunks directly into a transceiver or into active electronics. The MTP® Conversion assemblies allows users to convert their existing MTP® backbone cables to an MTP® type which matches their active equipment.

These assemblies can support 10/40/100G or simplify migration to 40/100G. When used with SOURCE+ cassettes, enclosures, adapter panels, and patch cords they provide an end-to-end solution backed by our systems solution warranty.



FIBER INSERTION LOSS PERFORMANCE (dB)*

| | TYP IL | | MAX IL | | | TYP IL | | MAX IL | |
|--|--------------------------------------|------|--------|-----|--|--|------|--------|-----|
| | LC/SC | MTP® | .20 | .25 | | LC/SC | MTP® | .20 | .25 |
| Multimode cables are tested at both wavelengths 850nm and 1300nm | LC/SC | MTP® | .20 | .25 | Singlemode assemblies are tested at both wavelengths 1310nm and 1550nm | LC/SC | MTP® | .20 | .25 |
| | Minimum Return Loss LC/SC/MTP® -25dB | | | | | Minimum Return Loss LC/SC -65dB (APC) LC/SC -57dB (UPC) MTP® -60dB | | | |

* Consult sales for low loss values

Features & Benefits

- 100% factory terminated and tested ensuring reliability and quality
- Standard and low loss versions available to meet loss budget requirements of the network
- 8, 12, and 24F MTP® assemblies can support 10/40/100G and simplified migration to 40/100G
- Custom built to customer specifications including length, breakouts, and labeling
- All assemblies are shipped with test results and labeled with a unique serial number for traceability
- Available on method A, B, or C (12F)
- Available in fiber counts of 8-144 fibers in multimode or singlemode
- Assemblies over 100 feet are shipped on a reel
- Pulling eye available upon request
- 6" subunits when applicable
- Stagger in groups of 4 every 6" MTP®

EXAMPLE: MTP®484GP-12F/F-A-150-V3

| MTP® Fiber Assembly | Strand Count | Glass Type | Cable Type | Ferrule Count | Connector Type Side 1/2 | Wiring Method | Length | BO Side 1 | Stagger Type Side 1 | BO Side 2 | Stagger Type Side 2 |
|---------------------|--------------|----------------------------|-------------------------------------|-------------------------|---------------------------|-----------------------------|---|------------|--|------------|--|
| MTP® | 48 | 4G | P | 12 | F/F | A | 150 | V | 3 | V | 3 |
| | 8 | XG = OM3 50um (Aqua) | P = Plenum Round Micro Distribution | *If more than 12-strand | F = MTP® Female (No pins) | A = Method A (Straight) | Length in feet | T = 12" BO | 1 = Stagger Leg 1 Longest | T = 12" BO | 1 = Stagger Leg 1 Longest |
| | 12 | | | 12 = 12-Fiber Ferrules | M = MTP® Male (With pins) | B = Method B (Reversed) | Add 'M' after number for a meter length | U = 18" BO | 2 = Stagger Leg 18 (or last leg) Longest | U = 18" BO | 2 = Stagger Leg 18 (or last leg) Longest |
| | 24 | 4G = OM4 50um (Aqua) | R = Riser Round Micro Distribution | 24 = 24-Fiber Ferrules | / | C = Method C (Pair Flipped) | | V = 24" BO | | V = 24" BO | |
| | 36 | | | | F = MTP® Female (No pins) | X = 24-Fiber Ferrule | | W = 36" BO | | W = 36" BO | |
| | 48 | 5G = OM5 50um (Lime Green) | L = Low Smoke Zero Halogen | | M = MTP® Male (With pins) | | | X = 48" BO | 3 = No Stagger | X = 48" BO | 3 = No Stagger |
| | 72 | | IAP = Interlocking Armored Plenum | | | | | Y = 72" BO | | Y = 72" BO | |
| | 96 | SM = Single Mode (Yellow) | IO = Indoor /Outdoor | | | | | Z = 96" BO | | Z = 96" BO | |
| | 144 | | RIB = Ribbon | | | | | | | | |

MTP® Harness/Breakout Cables

SOURCE+ MTP® harnesses directly connect to the active equipment that utilize LC or into an active transceiver. The MTP® harness eliminates the need for cassettes allowing longer distances, more interconnect points, and with less insertion loss. The harness provides low loss alternative to conversion modules because they eliminate a mated MTP® pair.



When used in conjunction with SOURCE+ trunks, enclosures, adapter panels, and patch cords, they provide an end-to-end solution backed by our systems solution warranty.

FIBER INSERTION LOSS PERFORMANCE (dB)*

| | TYP IL | | MAX IL | | | TYP IL | | MAX IL | |
|--|--------------------------------------|-----|--------|-------|--|--|-----|--------|-----|
| | LC/SC | .20 | .25 | LC/SC | | .20 | .25 | MTP® | .50 |
| Multimode cables are tested at both wavelengths 850nm and 1300nm | MTP® | .25 | .35 | | Singlemode assemblies are tested at both wavelengths 1310nm and 1550nm | MTP® | .50 | .60 | |
| | Minimum Return Loss LC/SC/MTP® -25dB | | | | | Minimum Return Loss LC/SC -65dB (APC) LC/SC -57dB (UPC) MTP® -60dB | | | |

* Consult sales for low loss values

Features and Benefits

- Factory terminated and tested ensuring reliability and quality
- Standard and low loss versions available to meet the loss budget requirements of the network
- 8, 12, and 24F MTP® assemblies support 10/40/100G and simplified migration to 40/100G
- Available in fiber counts of 8-144
- Fibers in multimode or singlemode
- Custom built to customer specifications including length, breakouts, and labeling
- All assemblies are shipped with test results and labeled with a unique serial number for traceability
- Assemblies over 100 feet are shipped on a reel
- Pulling eye available upon request
- 6" subunits when applicable
- Stagger in groups of 12 every 2" single fiber
- Stagger in groups of 3 every 6" MTP®

EXAMPLE: MTP®244GP-F/LC-A-10M

| MTP® Fiber Assembly | Strand Count | Glass Type | Cable Type | Connector Type Side 1/2 | Wiring Method | Length |
|---------------------|--------------|----------------------------|-------------------------------------|---------------------------|-----------------------------|---|
| MTP® | 24 | 4G | P | - F/LC | - A | - 10M |
| | 8 | XG = OM3 50um (Aqua) | P = Plenum Round Micro Distribution | F = MTP® Female (No pins) | LC | Length in feet |
| | 12 | | | M = MTP® Male (With pins) | LC-APC | Add 'M' after number for a meter length |
| | 24 | 4G = OM4 50um (Aqua) | R = Riser Round Micro Distribution | | SC | |
| | 36 | | | | SC-APC | |
| | 48 | 5G = OM5 50um (Lime Green) | L = Low Smoke Zero Halogen | | | |
| | 72 | | | | | |
| | 96 | | | | | |
| | 144 | SM = Single Mode (Yellow) | IAP = Interlocking Armored Plenum | | | |
| | | | IO = Indoor /Outdoor | | | |
| | | | RIB = Ribbon | | | |
| | | | | | A = Method A (Straight) | |
| | | | | | B = Method B (Reversed) | |
| | | | | | C = Method C (Pair Flipped) | |
| | | | | | X = 24-Fiber Ferrule | |

SD1 Cassettes

SOURCE+ SD1 cassettes serve as the point of interconnection between the MTP® trunks and MTP® harnesses. The cassettes breakout the MTP® to single fiber connectors and allow easy patching within the network. When used in conjunction with SOURCE+ MTP® trunks, enclosures, adapter panels and patch cords they provide an end-to-end solution backed by our systems solution warranty.

MTP®-MTP® conversion cassettes support 40G and upward migration to 100G. 8, 12, and 24F MTP® ferrules.

The conversion cassettes utilize 1x24F MTP® in and 3x8F MTP® out.

Consult sales for more information.



FIBER INSERTION LOSS PERFORMANCE (dB)*

| | TYP IL | | MAX IL | |
|--|--------|------|--------|------|
| | LC/SC | MTP® | LC/SC | MTP® |
| Multimode cables are tested at both wavelengths 850nm and 1300nm | .20 | .25 | .25 | .35 |
| Singlemode assemblies are tested at both wavelengths 1310nm and 1550nm | .20 | .25 | .50 | .60 |

** Consult sales for low loss values*

Minimum Return Loss
LC/SC/MTP® -25dB

Minimum Return Loss
LC/SC -65dB (APC)
LC/SC -57dB (UPC)
MTP® -60dB

Features & Benefits

- Factory terminated and tested ensuring reliability and quality
- Standard and low loss versions available to meet the loss budget requirements of the network
- Variety of single fiber interfaces including LC and SC
- 8, 12, and 24F MTP® ferrules
- Cassettes are compatible with the SD1 series accommodating up to 72 fibers in 1RU
- All adapters are secured to the cassettes eliminating possible movement of the mated pair
- LC adapters come with an internal shutter to prevent exposure to light and excess dust build up for added protection to the eye

EXAMPLE: CAS-SD124F4GLC

| Cassettes | Series | Fibers | MTP® Style | Type | Connector |
|-----------|--------|--------|----------------------|-------------|-------------|
| CAS | - SD1 | 24 | F | 4G | LC |
| | SD1 | 8 | F = 12 Fiber Ferrule | 4G = OM4 MM | LA = LC/APC |
| | | 12 | X = 24 Fiber Ferrule | XG = OM3 MM | LC = LC/UPC |
| | | 24 | | SM = SM | SA = SC/APC |
| | | | | | SC = SC/UPC |



Adapter Panels

SOURCE+ adapter panels serve as the point of interconnection among MTP® trunks, MTP® harnesses and pre-terminated fiber cable assemblies.

The adapter panels are part of NetSource's end-to-end solution and are backed by a 25-year warranty.



Features and Benefits

- Variety of single fiber adapters including LC, MTP®, SC, and ST
- Adapter housing colors follow TIA/EIA-568-C.3 suggested color scheme
- Adapter panels are available 6 fiber, 8 fiber, 12 fiber, 24 fiber, 72 fiber, and 96 fiber
- All adapters are secured to the panel, eliminating possible movement of the mated pair
- LC adapters come with an internal shutter to prevent exposure to light and excess dust build up for added protection to the eye
- The single fiber adapters come with a ceramic split sleeve
- The MTP® adapter is available opposing keyway and key up/key up

EXAMPLE: PNL-SDI24LCAQ

| Panels | Series | Fibers | Adapters | Color |
|--------|--------|--------|----------|------------------|
| PNL | - SD1 | 24 | LC | AQ |
| | SD1 | 8 | LC | AQ = Aqua |
| | | 12 | SC | BL = Blue |
| | | 24 | ST | GN = Green |
| | | 72* | MTP®* | EV= Erica Violet |
| | | 96* | | |

*Only available when using MTP®



SD1 Enclosures

SOURCE+ SD1 enclosures support SD1 cassettes, adapter panels, and MTP® trunks. When used in conjunction with SOURCE+ MTP® trunks, adapter panels, and patch cords they provide an end-to-end solution and are included in our systems solution warranty.

Features and Benefits

- The enclosures are available in patch, patch and splice, and splice
- The enclosures can be prewired to customer specifications
- Locks available upon request
- Easy access with a slide out drawer front and rear with removable top cover
- Each enclosure can accommodate 72 fibers per rack unit: (3) adapter panels, (3) cassettes and/or (3) splice trays per rack unit
- Available in 1RU, 2RU, and 4RU
- Includes internal fiber management
- Material: 16 Gauge CRS with a black powder coat finish
- Mounts in 19" and 23" racks
- Standard 19" sliding mounting brackets allow up to 5" extension to a flush mount projection

PATCH

SD1-1RU 1.75"x15"x19"

Accepts (3) adapter panels or (3) cassettes

SD1-2RU 3.5"x15"x19"

Accepts (6) adapter panels or (6) cassettes

SD1-4RU 7"x15"x19"

Accepts (12) adapter panels or (12) cassettes



PATCH & SPLICE

SD1-1RU-P/S 1.75"x15"x19"

Accepts (3) adapter panels and (3) splice trays

SD1-2RU-P/S 3.5"x15"x19"

Accepts (6) adapter panels and (6) splice trays

SD1-4RU-P/S 7"x15"x19"

Accepts (12) adapter panels and (12) splice trays



SPLICE

SD1-1RU-S 11.75"x15"x19"

Splice only accepts (3) splice trays

SD1-2RU-S 11.75"x15"x19"

Splice only accepts (6) splice trays

SD1-4RU-S 7"x15"x19"

Splice only accepts (12) splice trays



Wall Mounts

SOURCE+ SD1 wall mount enclosures support the SD1 cassettes and adapter panels in an indoor environment.

Features and Benefits

- The enclosures are available for direct termination from 6-144 fibers with lock or latch
- Material: 16 Gauge CRS with a black powder coat finish*

*Consult sales for patch and splice options.



WALL-SD1-1

7"x7"x1.5"

Patch only accepts (1) adapter panel or (1) cassette
UP TO 24 FIBERS

WALL-SD1-2

13"x9.25"x3.5"

Patch only accepts (2) adapter panels or (2) cassettes
UP TO 48 FIBERS

WALL-SD1-4

13"x11.5"x3.5"

Patch only accepts (4) adapter panels or (4) cassettes
UP TO 96 FIBERS

WALL-SD1-8

17"x12"x5.87" (+inner panel)

Patch only accepts (8) adapter panels or (8) cassettes
UP TO 192 FIBERS

WALL-SD1-12

17"x16"x5.87"

Patch only accepts (12) adapter panels or (12) cassettes
UP TO 192 FIBERS

HD1 Series

SOURCE+ HD1 series can accommodate 25% more fiber in a 1RU than our standard SD1 series.

These components are designed to work with SOURCE+ MTP® cable assemblies and patch cords for a complete high density solution supporting 10/40/100G.

ADAPTER PANELS

- The adapter panels are available in a variety of fiber adapters, including LC and MTP® adapters supporting Base-8, 12, and 24 backbones, as well as multifiber solutions
- All adapter panels are secured to the panels eliminating possible movement of the mated pair
- LC adapters come with an internal shutter to prevent dust

EXAMPLE: PNL-HD1-12LCAQ

| Panels | Series | Fibers | CONN | Color |
|--------|--------|--------|------|------------|
| PNL | - HD1 | - 12 | LC | AQ |
| | HD1 | 8 | LC | AQ = Aqua |
| | SD1 | 12 | SC | BL = Blue |
| | | 24 | ST | GN = Green |
| | | 72* | MTP* | |
| | | 96* | | |

*Only available when using MTP®

CASSETTES

- The HD1 cassettes are available with an LC interface supporting Base-8, 12, and 24 fiber in a variety of fiber types including OM3, OM4, and OS2
- In addition to supporting 10/40/100G the cassettes are also available with an SC or ST interface
- All adapters are secured to the cassette, eliminating possible movement of the mated pair
- The LC adapters come with an internal shutter to prevent dust
- The cassettes are available in both standard and low loss to support maximum distances required by the 40/100G Ethernet loss budget

FIBER INSERTION LOSS PERFORMANCE (dB)*

| | TYP IL | | MAX IL | | TYP IL | | MAX IL |
|--|--------------------------------------|-----|--------|--|--|-----|--------|
| | LC/SC | .20 | .25 | | LC/SC | .20 | .25 |
| Multimode cables are tested at both wavelengths 850nm and 1300nm | MTP® | .25 | .35 | Singlemode assemblies are tested at both wavelengths 1310nm and 1550nm | MTP® | .50 | .60 |
| | Minimum Return Loss LC/SC/MTP® -25dB | | | | Minimum Return Loss LC/SC -65dB (APC) LC/SC -57dB (UPC) MTP® -60dB | | |

* Consult sales for low loss values

EXAMPLE: CAS-HD124F4GLC

| Cassettes | Series | Fibers | MTP® Style | Type | Connector |
|-----------|--------|--------|----------------------|-------------|-------------|
| CAS | - HD1 | 24 | F | 4G | LC |
| | HD1 | 8 | F = 12 Fiber Ferrule | XG = OM3 MM | LA = LC/APC |
| | | 12 | X = 24 Fiber Ferrule | 4G = OM4 MM | LC = LC/UPC |
| | | 24 | | SM = SM | SA = SC/APC |
| | | | | | SC = SC/UPC |

FIBER TRAYS

- HD1 rack mount fiber trays support HD1 cassettes and adapter panels
- Fiber trays are available in both 1RU and 2RU accommodating up to 96 fiber per 1RU
- Each fiber panel comes with a bracket to tie down and route the backbone cable

HD1-1RU-PNL **1.75"x19"x7"**
Accepts 4 HD adapter panels or 4 HD cassettes

HD1-2RU-PNL **3.5"x19"x7"**
Accepts 8 HD adapter panels or 8 HD cassettes



Fiber SFP, QSFP+ AOC DAC

NetSource offers an extensive range of fiber optic transceivers and active optical cables for Ethernet, InfiniBand, and Fiber Channel+ (FCoE) applications. Our transceivers and AOC support high-end servers over 4/8/10G fiber channel transmissions.

All transceivers are pre-programmed and tested to match your equipment's requirements to ensure compatibility. All products are compliant to MSA and IEEE standards.



SFP+ AND QSFP+ DAC ACTIVE OPTICAL CABLES

- SFP+ 10G data link
- Typical data rate 10.3125G/s
Max 10.42 G/s
- Various fiber lengths ranging from 1-100 meters
- Single 3.3V power supply

QSFP+ 4/8/10G FIBER CHANNEL

- Data rate of 10.5 Fb/ss each lane
- Maximum aggregate data rate 42.0 G/s
- Various fiber lengths ranging from 1-100 meters
- Single 3.3V power supply

100G EDR QSFP28

- 4 independent full-duplex channels
- Transmission data rate up to 28G/s per channel
- Reliable VCSEL array technology using multimode fiber
- Available in standard lengths of 3, 5, 10, 15, 20, 30, 50, 100m
- Maximum power consumption 3.5W each terminal
- Operating case temperature 0°C to +70°C
- Single 3.3V power supply
- RoHS 6 compliant
- Hot pluggable QSFP form factor

TRANSCEIVERS

- Consult sales for hot pluggable transceivers in a variety of distance options, data rate, and protocols
- 40G/s QFFP+SR4
- 56G/s QFFP+SR4
- Dual Fiber SFP
- 6-10G SFPT
- 10G DWDM SFP+
- 10G CWDM SFP+

Fiber Solutions

NetSource pre-terminated end-to-end fiber solutions are designed to be user friendly, cost-effective, and easy to install. This end-to-end system supports a customized fiber solution backed by our system warranty.*

NetSource Fiber Solutions provides a comprehensive line of various cabling options utilizing a complete set of components. NetSource Fiber Solutions components include enclosures, patch cords, patch panels, and backbone trunk assemblies manufactured to your specific requirements. The components arrive on the job site, on time and ready to be deployed allowing a quick, aesthetically seamless install.

Features and Benefits

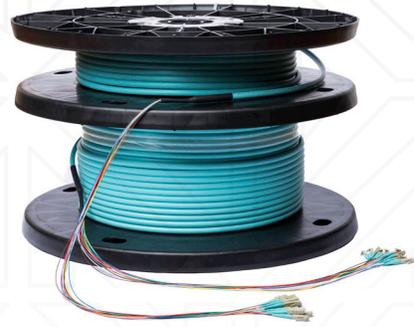
- Cost-effective**
- Rapid deployment
 - Less scrap and waste
 - Reduces labor and installation time

- Reliability**
- Factory terminated and tested in a controlled environment
 - Product consistency
 - Built to customer specification

*consult sales for warrantied solutions

Pre-Terminated Multifiber Assemblies

Pre-terminated multi-strand fiber solutions from NetSource are designed to save both time and money. These assemblies are available with a wide variety of custom specifications.



Features and Benefits

- Cost-effective
- Rapid deployment
- Less scrap and waste
- Reduces labor and installation time
- Optimum performance
- Reliability
- Factory terminated and tested in a controlled environment
- Product consistency
- Built to customer specification
- Custom manufactured
- Standard and low loss options available
- Exceeds industry standards

EXAMPLE: FA36SMP-LC/SC-50-VBO9

| MTP® Fiber Assembly | Strand Count | Glass Type | Cable Type | Connector Type Side 1/2 | Length | BO Length | BO | BO Size |
|---------------------|--------------|----------------------------|-------------------------------------|-------------------------|------------------------|---|--|---------------------------------|
| FA | 36 | SM | P | - LC/SC | - 50 | - V | BO | 9 |
| | 8 | XG = OM3 50um (Aqua) | P = Plenum Round Micro Distribution | FA = FC-APC FC = FC | FA = FC-APC FC = FC | Length in feet Add 'M' after number for a meter length | T = 12" BO U = 18" BO V = 24" BO W = 36" BO X = 48" BO Y = 72" BO Z = 96" BO | 9 = 900um 2 = 2mm 3 = 3mm |
| | 24 | 4G = OM4 50um (Aqua) | R = Riser Round Micro Distribution | LA = LC-APC LC=LC | LA = LC-APC LC=LC | | | |
| | 36 | | | SA=SC-APC | SA=SC-APC | | | |
| | 48 | 5G = OM5 50um (Lime Green) | L = Low Smoke Zero Halogen | SC=SC | SC=SC | | | |
| | 72 | | IAP = Interlocking Armored Plenum | ST=ST | ST=ST | | | |
| | 96 | SM = Single Mode (Yellow) | IO = Indoor /Outdoor | | | | | |
| | 144 | | RIB = Ribbon | | | | | |

Pigtails

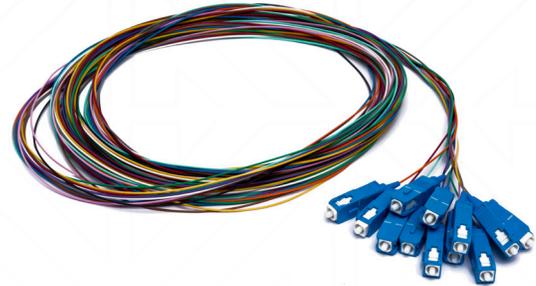
Typically 1 meter to 3 meters in length, pigtails are assemblies that have a factory-terminated connector on one end of a tight buffered fiber and are open on the other end. This open end is to be used for fusion splicing to another piece of fiber.

Pigtails eliminate the need for mechanical splice connectors and any other type of field-termination.



NetSource offers pigtails with a wide variety of options:

- Individual 900 micron 'unjacketed' fiber terminated with any type of connector and in any glass type
- Multi-strand fiber without a jacket, bundled in color-coded groups of 6 or 12
- Multi-strand fiber that remains jacketed, typically with an 18" 900 micron breakout
- 6, 12, 24, 36, 48, 72, 144, and 288-strand fiber counts available

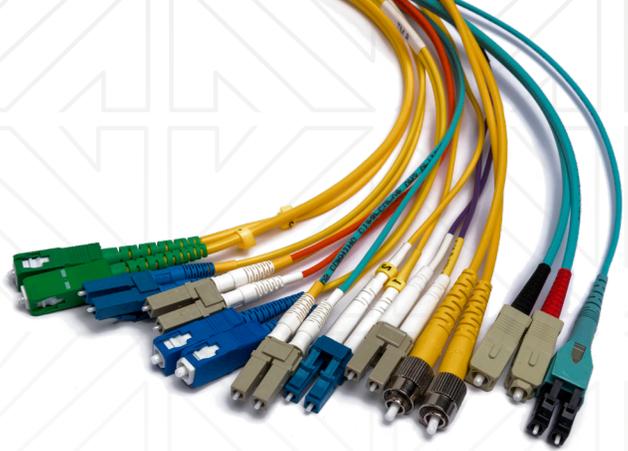


EXAMPLE: FP12900XG-LC-3M

| Fiber Pigtails | Strand Count | | Glass Type | Cable Type | | Connector Type Side 1 | Length |
|----------------|--------------|-------------------------|----------------------------|------------------------------------|---|-----------------------|---|
| FP | 12 | 900 | XG | - | - | LC | 3M |
| | 1 | If it's a 900um pigtail | XG = OM3 50um (Aqua) | No letter = Riser Rated Jacket | | FA = FC-APC | Length in feet Add 'M' after number for a meter length |
| | 2 | | | P = Plenum | | FC = FC | |
| | 6 | | 4G = OM4 50um (Aqua) | Round Micro Distribution | | LA = LC-APC | |
| | 12 | | 5G = OM5 50um (Lime Green) | R = Riser Round Micro Distribution | | LC=LC | |
| | 24 | | SM = Single Mode (Yellow) | L = Low Smoke Zero Halogen | | SA=SC-APC | |
| | 36 | | | IAP = Interlocking Armored Plenum | | SC=SC | |
| | 48 | | | IO = Indoor/Outdoor | | ST=ST | |
| | 72 | | | RIB = Ribbon | | | |
| | 96 | | | | | | |
| | 144 | | | | | | |

Fiber Patch Cords

All cables are factory terminated and 100% optically tested to meet or exceed industry performance standards. Lifetime warranty against defects in materials and craftsmanship. NetSource utilizes the most advanced testing and polishing procedures available.



Features & Benefits

- Available in all standard glass types including OM1, OM2 OM3, OM4, OM5 multimode, and singlemode
- Available using all industry standard connectors including LC, SC, ST, Angled Polish Connectors, and LC Uniboot Connectors
- Available in U.S. Made, Corning® Gold, and Net-Lite Series

EXAMPLE: FASMP-LC/SC-15M

| Options Type | Glass Type | Cable Type | Connector Type Side 1/2 | | Length |
|---|---|---|--|--|---|
| FA | SM | P | LC/SC | | 15M |
| G-Fa = Corning® Gold FA = U.S. Made NL = Net-Lite | XG = OM3 50um (Aqua) 4G = OM4 50um (Aqua) 5G = OM5 50um (Lime Green) SM = Single Mode (Yellow) 62 = OM1 62.5 (Orange) | No letter equals Riser P = Plenum Round Micro Distribution LSZH = Low Smoke Zero Halogen | FA = FC-APC FC = FC LA = LC-APC LC=LC LU=LC UNIBOOT SA=SC-APC SC=SC ST=ST | FA = FC-APC FC = FC LA = LC-APC LC=LC LU=LC UNIBOOT SA=SC-APC SC=SC ST=ST | Length in feet Add 'M' after number for a meter length |

U.S. MADE FIBER PATCH CABLES

Our U.S. Made fiber optic patch cords utilize the same industry leading manufacturing processes handed down from Corning®. Made in the USA with high quality components, these cables are available in all types of connector configurations for both custom and standard length cords.

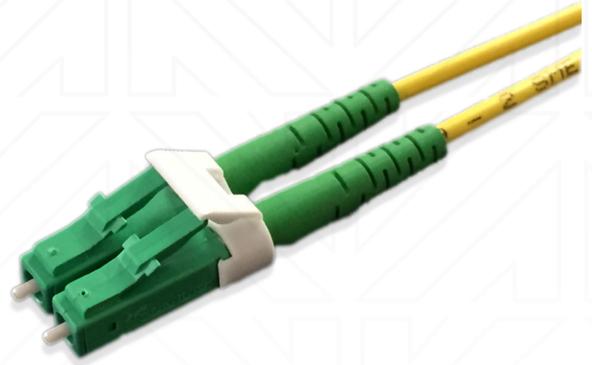
A variety of different jacketing options are available, including different colors and sizes. We will offer a system solutions warranty for customers purchasing fiber patch cords in our SOURCE+ Fiber Solutions system.



Fiber Patch Cords

CORNING® GOLD FIBER PATCH CABLES

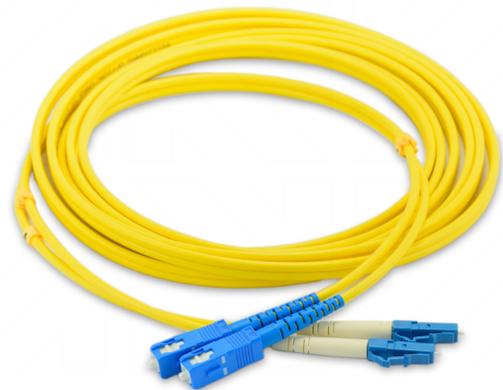
NetSource's association with Corning® Cable Systems in the CAH Gold Program enables us to provide high-quality Corning® equivalent fiber patch cables to complement a full Corning® warranty. These cables are manufactured in accordance with the high standards that have made Corning® #1 in the industry for decades. Able to be built to all custom lengths and specifications, these cables are always available with a timely turnaround.



CORNING
CAH Connections™
Gold Program

NET-LITE ECONOMY PATCH CABLES

NetSource's Net-Lite fiber jumpers are our most economical line of fiber patch cables. These are kept in stock and are often able to ship same day. Net-Lite jumpers are stocked in meter lengths between 1 and 30 meters. Custom lengths and specifications are available at the same economical price point and typically carry a 5-7 day lead time.



LC Uniboot Patch Cords

CORNING® LC UNIBOOT PATCH CORDS

Corning's® LC Uniboot allows you to manage polarity when and where you need it with a simple flip. These fiber patch cords are also backed by Corning's® 25-year warranty through the Gold Program.

Combine the above features with the NetSource commitment to fast delivery, quality products, and excellent service and you have an unbeatable combination.

- Brand you can trust
- Proven product reliability
- Small form factor connectors
- Single 2mm cable for 2 fibers to facilitate easier and better cable routing for densely populated areas
- Unique and rapid field polarity switching capability that allows changes without exposing the fiber
- Polarity identification features

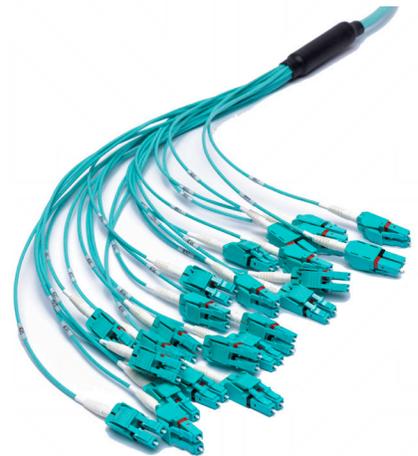


CORNING
CAH Connections™
Gold Program

LC UNIBOOT PATCH CORDS

LC Uniboosts use a single boot and a round style 2mm or 3mm jacket instead of duplex zipcord cables, reducing cable size accommodating today's highly dense applications. The housing of the Uniboosts allows it to be taken apart without any special tools to reverse or flip polarity without having to re-terminate the connectors. The uniboost connectors fits into any standard Duplex LC adapter.

- Compact design
- Polarity management
- No special tools required



Copper Trunks & Bundled Assemblies

COPPER TRUNKS

NetSource pre-terminated end-to-end copper solution is designed to be user friendly, cost-effective, and easy to install. This end-to-end system supports a customized CAT6/6A solution backed by a warranty.

- Reduces labor and installation time
- Less scrap and waste
- Reliability
- Factory terminated and tested ensuring reliability and quality
- Product consistency
- Built to customer specification



BUNDLED ASSEMBLIES

NetSource copper bundles are the backbone of the pre-terminated copper solution. When used in conjunction with patch panels, patch cords, and work stations they provide an end-to-end solution backed by our system warranty.

- Factory terminated and tested ensuring reliability and quality
- Custom built to customer specifications including length, breakouts, and labeling
- Bundles can be terminated to plugs (male) or jacks (female) in groups of 6 to 24 with tie wraps/velcro or under a braided sleeve
- Available in Riser or Plenum in a variety of colors for both the sleeving and the cable

EXAMPLE: BU12-C6PMFBL50

| Bundled Assemblies | Cables in Bundles | Category Rating | Jacket Rating | Connectors | Color | Length |
|--------------------|-------------------|----------------------------------|---------------|------------------------------|-------|---|
| BU | 12 | - C6 | P | MF | BL | 50 |
| | 6 12 24 | C6= Standard CAT6 C6A = CAT6A | P= Plenum | M= RJ45 Plug F= RJ45 Jack | BL | Length in feet Add 'M' after number for a meter length |



Patch Panels

NetSource's end-to-end solution is available in both STP and UTP CAT6 and CAT6A.

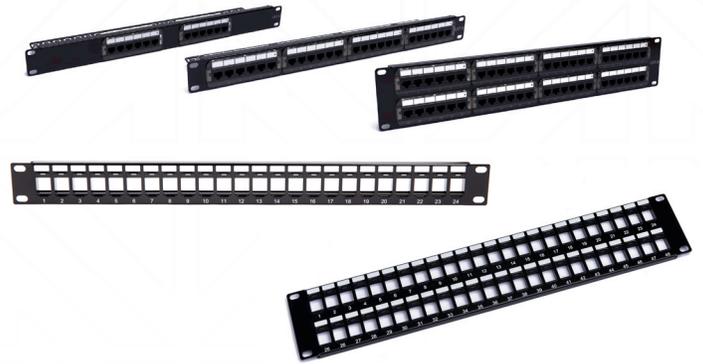
Features and Benefits

- Flexible installation – install from either front or rear of faceplate
- Quick identification – colored icons provided for port identification
- Easy termination – punch down with standard 110 termination tools
- Universal wiring – T568A and T568B wiring compatible
- Field Configurable Patch Panels allow you to customize your application with snap-in keystone jacks

PATCH PANELS

| | | |
|----------------------|--|------------------|
| P/P-12P-C6 | 12 Port CAT6 110 Patch Panel | 1.75"x19" |
| P/P-24P-C6 | 24 Port CAT6 110 Patch Panel | 1.75"x19" |
| P/P-48P-C6 | 48 Port CAT6 110 Patch Panel | 3.5"x19" |
| KJ-PNL-24-1RU | 24 Port 1U Blank Keystone Panel <i>with Bezel</i> | 1.75"x19" |
| KJ-PNL-48-1RU | 48 Port 2U Blank Keystone Panel <i>with Bezel</i> | 3.5"x19" |

FIELD CONFIGURABLE PATCH PANELS



JACKS AND ADDITIONAL MODULES

| | |
|----------------------|--|
| KJ-C6-XX* | CAT6 Keystone Jack |
| KJ-C6A-XX* | CAT6A Keystone Jack |
| KJ-C6-SH | CAT6 Shielded Keystone Jack |
| KJ-BLANK | Blanks Package Of 25 |
| KJ-C5E-FF-XX* | CAT5E Keystone Coupler |
| KJ-C6-FF-XX* | CAT6 Keystone Coupler |
| KJ-C5E-FF-SH | CAT5E Shielded Keystone Coupler |
| KJ-C6-FF-SH | CAT6 Shielded Keystone Coupler Diecast |
| KJ-FCONN-XX* | F-Connector Keystone Coupler |
| KJ-BNC-XX* | BNC Keystone Coupler |

*XX = Color

Available in:
Blue
Black
Green
Orange
Red
White
Yellow



Workstations

NetSource workstation solutions include standard and high density faceplates and surface mount boxes, along with a variety of snap-in hacks and modules to help make installations quick and easy.

Features and Benefits

- Includes all necessary hardware for easy installation
- Durable construction to ensure long life
- Variety of custom configuration options
- Compatible with a wide range of copper and fiber modules

FIBER MODULES

KJ-LC-XX* LC Duplex Keystone White

KJ-SC-GR-XX* SC Simplex Keystone White

*XX = Color

Available in:
Aqua
Beige
Blue
Erika Violet
Green
White



FACEPLATES AND SURFACE MOUNT BOXES

KJ-SG-FP-01 Keystone Face Plates, Single Gang, Plastic White, 1 Port

KJ-SG-FP-02 Keystone Face Plates, Single Gang, Plastic White, 2 Ports

KJ-SG-FP-03 Keystone Face Plates, Single Gang, Plastic White, 3 Ports

KJ-SG-FP-04 Keystone Face Plates, Single Gang, Plastic White, 4 Ports

KJ-SG-FP-06 Keystone Face Plates, Single Gang, Plastic White, 6 Ports

KJ-SFB-01 Keystone 1 Port Surface Mount Box White

KJ-SFB-02 Keystone 2 Port Surface Mount Box White

KJ-SFB-04 Keystone 4 Port Surface Mount Box White

KJ-SFB-06 Keystone 6 Port Surface Mount Box White



Copper Patch Cords

NetSource copper patch cords support a variety of applications from voice and video to high speed networks and POE. All copper cables are manufactured to your custom requirements and meet or exceed industry standards for NEXT and return loss.

Our cords are factory terminated for superior performance guaranteeing consistent reliable results.



Features & Benefits

- Available in CAT5E, CAT6, CAT6A, shielded and unshielded, riser, plenum, and LSZH in your choice of length
- Available in U.S. Made and Economy Series
- Industry standard T-568A, T568-B, crossover or custom wiring available
- Options for non-booted or variations of boots (snagless) available

EXAMPLE: PCC6B-BL-10

| Patch Cord Type | Boot Option | Category | Fixed Note | Additional Options | Color* | Length |
|---------------------------------------|---|--------------------------------|------------|---|--|---|
| PC | C | 6 | B | - | BL | - 10 |
| PC = U.S. Made IM = Economy Series | C = Clear Slimline Boot (only available w/U.S. made) S = Bubble Boot Blank = No Boot | 5E=CAT5E 6=CAT6 6A=CAT6A | | MP = Minipatch SH = Shielded Blank = Standard | AQ = Aqua BK = Black BL = Blue BN = Brown GN = Green GY = Gray LG = Lime Green OR = Orange PK = Pink PR = Purple RD = Red WH = White YL = Yellow | Length in feet Add 'M' after number for a meter length |

**Not all colors are available in Economy Series*

U.S. MADE CAT5E, CAT6, AND CAT6A PATCH CORDS

When used in conjunction with copper trunks, patch panels and work stations they provide an end-to-end solution backed by a system warranty.

Our U.S. Made copper patch cords are custom built to fit your requirements. Made in the USA with high quality components, these cables are available in CAT5E, CAT6, and CAT6A using 24 AWG stranded patch cable and high quality RJ45 modular plugs.

Patch cords are available in many different colors and can be built using no boots, slide-on boots, or clear slimline boots.

Also available in shielded stranded 26 AWG STP cable.



Copper Patch Cords

CAT6 AND CAT6A (MINI-PATCH) 28 AWG

NetSource Snagless Unshielded (UTP) and Shielded (STP) Slim 28 AWG Network Patch Cords are the perfect solution for high density and top of rack data center applications.

The use of 28 AWG reduces the overall foot print, utilizing less space and increasing air flow.

The smaller bend radius facilitates improved cable management in high density layouts.

When used in conjunction with copper trunks, patch panels, and work stations, they provide an end-to-end solution backed by a 25-year warranty.

Overall diameter:
15" (standard CAT6
overall diameter: .235")

Manufactured with:
28 AWG, stranded copper
(7x32), four twisted pairs



NETSOURCE ECONOMY SERIES CAT5E, CAT6 AND CAT6A

NetSource economy series are the most cost-effective solution in patch cables.

Cables are imported and stock/availability will vary.

The patch cables are available in standard colors and lengths with and without boots.



AOC DAC Copper

NetSource offers high speed copper cables for 10G and 40G Ethernet. The high speed copper cables are a low cost alternative for short reach applications.

The cable assemblies are hot swappable and the programmed EEPROM signature enables the host to differentiate between copper and a fiber module.

All products are compliant to MSA and IEEE standards.



SFP+ 10G

- SFP+ 10G data link
- Data rate 10.3125G/s
- Max 10.52G/s
- Passive copper cable .5m-10m (paddle cards plus copper cable)
- Active copper cable 10m-15m (equipped with chipset as signal repeater)
- Various fiber lengths up to 15 meters
- Single 3.3V power supply

QSFP+4/8/10G

- QSFP+ 4/8/10G fiber channel
- Data rate of 10.5G/s each lane
- Maximum aggregate data rate 42.0G/s
- Passive copper cable .5m-10m (paddle cards plus copper cable)
- Active copper cable 10m-15m (equipped with chipset as signal repeater)
- Various fiber lengths up to 15 meters
- Single 3.3V power supply

Power

Leading distributor of high quality power cords for data centers, IT installations, high temperature environments, and hazardous applications. We sell a full range of IEC Power Cords including C5, C7, C13, C14, C15, C19, C20, and C21 power cords, jumper cables, and adapters, as well as North American and international NEMA power cords.

We stock a wide range of data center power cables, jumper cables, adapters, and more to simplify your next installation. With right length cords and many different colors and gauges, we have the perfect cord to fit your needs.

5-15P TO C13 YELLOW



5-15P TO C13



5-15P TO C19



515-P TO C5



C13-C20 PURPLE



C14-2XC13 RED



C14-C13 GREEN



C14-C13



C14-C15



C14-C19 BLUE



C14-C21



LOCKING C13





NETSOURCE

Our commitment to quality
and customer service
is our connection to you!

25 West Street
Bolton, CT 06043

1-800-557-8818

netsource-inc.com

info@netsource-inc.com