CORNING

Enterprise Networks EMEA

Core Products FOR DATA CENTRE NETWORKS

Autumn 2014

Data Centres GET IT RIGHT, Right Now.

Corning Optical Communications offers tens of thousands of fibre optic products for virtually any communications network need. But for many data centre and SAN projects, particularly moves, adds, and changes (MACs), availability of key product information and the ability to get the product in the shortest possible time is critical. That's what this Core Products List is all about.

Here you'll find the names and part numbers of Corning Optical Communications' most popular fibre optic solutions for data centres and SANs as well as copper products required to get the job done right – right now!

As a leader in fibre optic innovation, we've also included information on new products recently launched and a list of valuable resources that can save you time and money. We work hard to make sure these great products are on the shelves of our distributors, ready for purchase when you need them.

This Core Products List is designed to make your job easier, faster, and more efficient.

Dc
Data Centre Products

Qu
Quality

In
Innovation

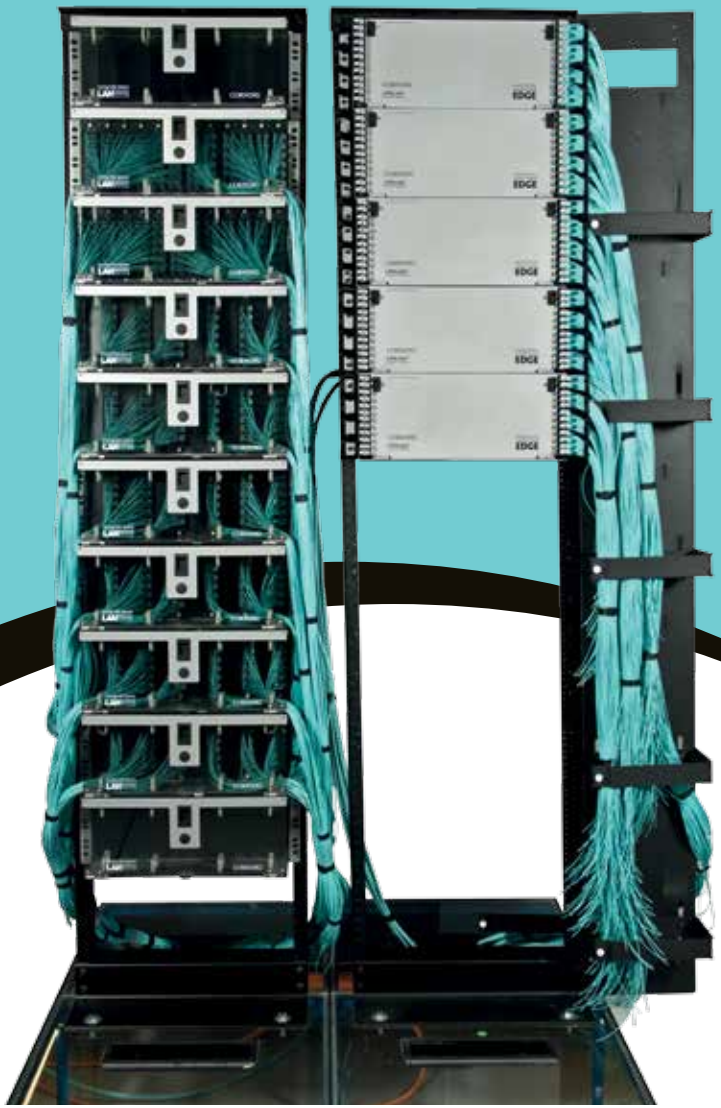
Get to know us!

Corning Optical Communications

Corning Optical Communications is a leading manufacturer of fibre optic and shielded copper communications system solutions for voice, data, and video network applications **worldwide**. We offer the broadest range of end-to-end **fibre optic** and **copper** product solutions for customers' telecommunications networks.

Underpinning its **innovation** in fibre technology is Corning's pioneering production standards. All Corning optical fibre is **manufactured** by Corning, at Corning facilities, to unique specifications and designs. Production processes are managed and controlled in-house, to the highest possible **quality**.

THE FUTURE IS NOW



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Fibre Core Products FOR DATA CENTRES

Don't see what you're looking for? Visit:
www.corning.com/opcomm/emea

CORNING

Did you know? Corning® ClearCurve® bend-insensitive OM3/OM4 multimode fibres offer outstanding transmission performance in fibre optic cabling systems. Corning ClearCurve fibres are the world's first laser-optimised multimode fibres to withstand tight bends at or below 7.5 mm radius with substantially less signal loss than traditional multimode fibres, while being fully standards compliant and backwards compatible.

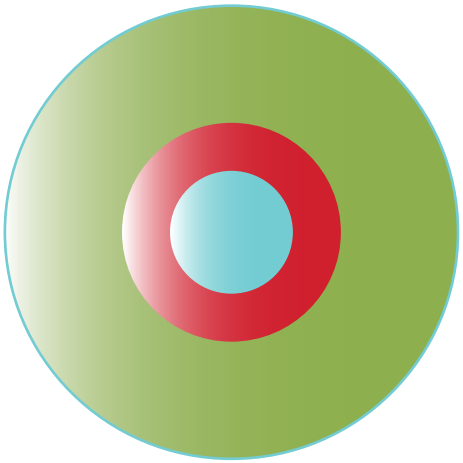
The Corning ClearCurve optical fibre is the core element ensuring operational reliability when designing custom-engineered components thanks to the significant reduction in macrobend loss even in the most challenging bend scenarios. This enables Corning to provide significantly greater density across the range combined with simple design and integration for LAN and SAN areas within the data centre, while the pre-terminated components allow for reduced installation time and faster moves, adds, and changes (MACs).

Recommended Standards for Multimode Fibre According to ITU or IEC

The IEC 60793-1-47 Standard			
Mandrel Radius	**Number of Turns**	**Maximum Attenuation at 850 nm**	**Maximum Attenuation at 1300 nm**
37.5 mm	100	< 0.5 dB	< 0.5 dB

The ITU-T G.651.1 Standard			
Mandrel Radius	**Number of Turns**	**Maximum Attenuation at 850 nm**	**Maximum Attenuation at 1300 nm**
15 mm	2	< 1.0 dB	< 1.0 dB

Corning® ClearCurve® Multimode Standard			
Mandrel Radius	**Number of Turns**	**Maximum Attenuation at 850 nm**	**Maximum Attenuation at 1300 nm**
37.5 mm	100	< 0.15 dB	< 0.15 dB
15 mm	2	< 0.1 dB	< 0.3 dB
7.5 mm	2	< 0.2 dB	< 0.5 dB



There is no specification for bending radii up to 7.5 mm

Pretium EDGE® Solutions: the definition of innovation

FOR **Data Centre and Storage Area Networks**

At Corning, we define innovation as a never ending drive to solve our customers' problems. That's why we have continued to enrich our Pretium EDGE® Solutions for data centres. Greater design flexibility, more ease of installation, and an even smaller cable footprint were all designed with you in mind. After all, your network challenges don't stop growing. Shouldn't your technology, and its manufacturer, be able to keep up?

Corning fibre optic solutions for data centres and SANs ensure your data centre is ready for your needs today, as well as tomorrow. While our Plug & Play™ Universal Systems components provide the ultimate in scalability, functionality and reliability, our Pretium EDGE Solutions offer faster installation times and moves, adds, and changes (MACs) to make migration in your data centre easier.

edge (ĕj)

v. To **advance** or push forward.
n. The point at which something **momentous** begins.

To learn more, visit **www.corning.com/opcomm/emea/pretiumedge**

Here's the latest LOOK

at our continuous product improvement!

This is an overview of the complete Pretium EDGE® Solution, but not all products are listed in this Core Catalogue. If you want to know more, please refer to the Pretium EDGE family spec sheet or click the QR code on this page to upload to your mobile device.

Pretium EDGE® Universal Modules

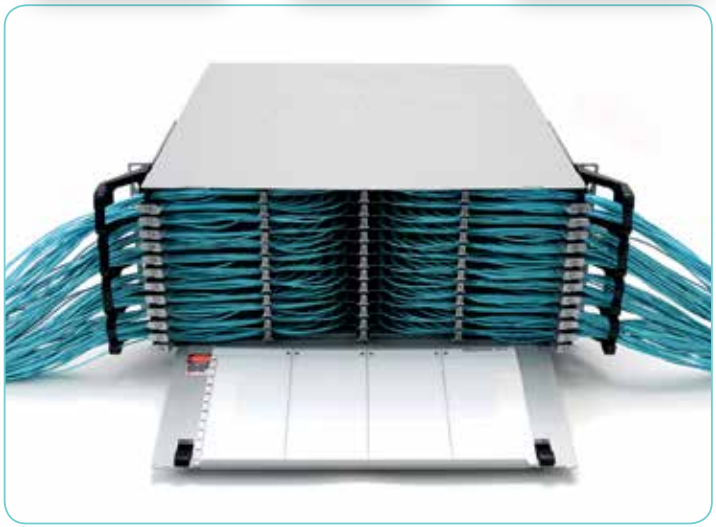
Pretium EDGE AO Modules

Pretium EDGE Tap Modules

Pretium EDGE SE Splice Cassettes

LC Duplex Patch Cables

MTP® Connector Patch Cables



Pretium EDGE Harness Types

Hybrid MTP to LC Duplex Trunks

MTP to MTP HD Trunks

Pretium EDGE HD Housings

Pretium EDGE FX Housings

Subfloor Distribution Solution

Overhead Distribution on Cable Trays

Why wait
when you can have your Data Centre solution in days?

FASTSHIP

IN STOCK – 72 HRS READY TO SHIP

Corning is making it faster to receive your Pretium EDGE® and Plug & Play™ Universal Systems Solutions for Data Centres and Storage Area Networks. With our FastShip and FastConnect programmes, moves, adds, and changes (MACs) have never been quicker. Our FastShip programme provides expedited shipping on your day-to-day product needs, within 72 hours ready to ship, from our fast assembly lines and in-stock product assortment. Thanks to our relationship with leading distributors, we have a large inventory of fibre connectivity products available across the EMEA region for immediate use.*

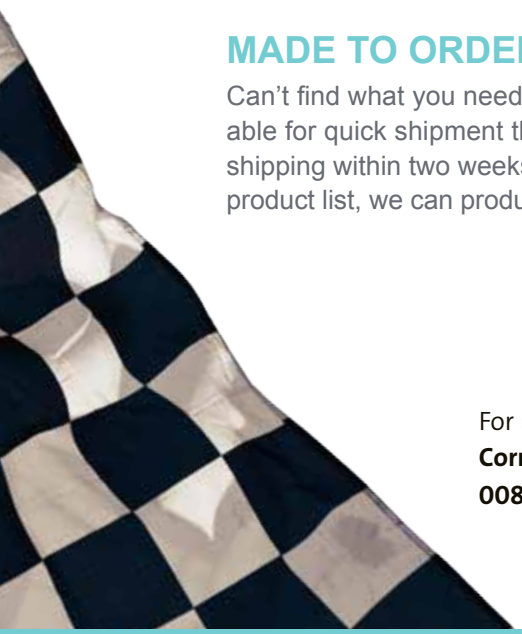
For more information, please contact
Corning Customer Care
00800 2676 4641 or emea.cs@corning.com

This flag next to a product number denotes it is available under the FastShip/FastConnect programme.

*Terms and conditions apply. Please visit http://opcomm.corning.com/fast for full details.

Get It Right, Right Now.

FASTCONNECT



MADE TO ORDER – TWO WEEKS ON SITE

Can't find what you need in stock? Our Enterprise Core Products for Data Centers and SANs are available for quick shipment through our FastConnect programme. This "made-to-order" Programme provides shipping within two weeks upon receipt of your purchase order at Corning. When you select items from our product list, we can produce and ship your items faster than ever!*

For more information, please contact
Corning Care
00800 2676 4641 or emea.cs@corning.com

This flag next to a product number denotes it is available under the FastShip/FastConnect programme.

*Terms and conditions apply. Please visit http://opcomm.corning.com/fast for full details.

Duplex Optic Systems

Build your solution for duplex systems 1/10/40G multimode or 1/10/40/100G single-mode by following the simple steps outlined below.

1 Housings

Pretium EDGE® Solutions

1U up to 144 Fibres

4U up to 576 Fibres

Plug & Play™ Systems

1U up to 72 Fibres

4U up to 288 Fibres

2 Trunks

12, 24, 48, 72, 96, and 144 Fibres

12, 24, 48, 72, 96, and 144 Fibres

3 MTP® to LC Duplex Modules

Module 12 Fibres

Module 24 Fibres

4 Patch Cables

LC Duplex – LC Duplex Uniboot

OR

SC Duplex – LC Duplex Uniboot

Parallel Optic Systems

Build your solution forparallel optic solutions on MTP® Base-12 Fibre Systems 1/10/40/100G multimode or 1/10/40/100G single-mode by following the simple steps outlined below.

1 Housings

Pretium EDGE® Solutions

1U up to 864 Fibres

4U up to 3,456 Fibres

Plug & Play™ Systems

1U up to 432 Fibres

4U up to 1,728 Fibres

2 Trunks

12, 24, 48, 72, 96, and 144 Fibres

12, 24, 48, 72, 96, and 144 Fibres

3 MTP® Adapter Panels

12, 24, and 72 Fibres Adapter Panel

72, 96, and 144 Fibres Adapter Panel

4 Harness Cables or Patch Cables

Cisco 9000 Stagger

Brocade Stagger

Cisco 7000 Stagger

Neutral

OR

MTP without Pin ⟷ MTP without Pin
MTP with Pin ⟷ MTP without Pin
MTP with Pin ⟷ MTP with Pin

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24 Standard Pretium EDGE Accessories

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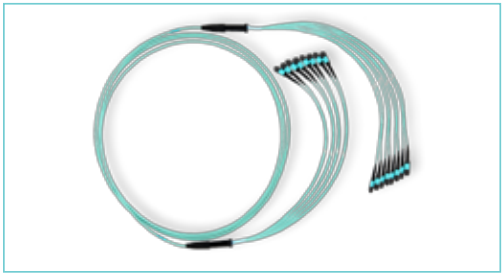
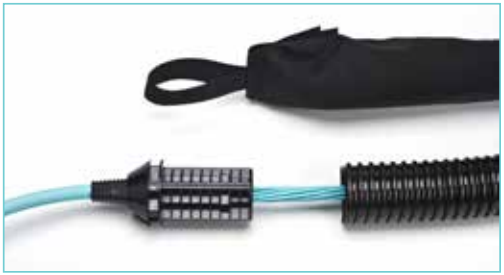
Pretium EDGE® Housings

Pretium EDGE® HD housings mount in 19-in racks or cabinets and provide industry-leading ultra-high-density connectivity when combined with Pretium EDGE modules, panels, harnesses, trunks, and patch cords. The unique design of Pretium EDGE HD housings include sliding drawers enabling module or panel installation from the front or rear of the housing. Each sliding drawer contains integrated cable routing elements to make real structured patch cable management possible whilst providing unprecedented finger access without the need for tools or any other accessories. The mounting and removal of trunks is a simple, quick, and tool-less operation enabling rapid deployment of high-fibre-count trunks for faster moves, adds, and changes (MACs).

Pretium EDGE Housings			
Description	**Maximum Capacity Pretium EDGE Module**	**Maximum Capacity MTP® Panel (Base-12)**	**Catalogue Number**
19-in 4U Pretium EDGE Housing with 12 separate sliding trays	288 x LC duplex ports (576 fibre)	288 x MTP ports (3,456 fibre)	**EDGE-04U**
19-in 1U Pretium EDGE Housing with three separate sliding trays	72 x LC duplex ports (144 fibre)	72 x MTP ports (864 fibre)	**EDGE-01U-SP**

Pretium EDGE® MTP® trunks are pre-terminated cables with 12-fibre MTP connectors on either side. The trunks build up the major skeleton of the passive network infrastructure, and thanks to the superior design including Corning® ClearCurve® fibres, they enable rapid deployment for your campus LAN or Data Centre facility. All trunks are shipped with strain-relief clips that allow tool-less installation in both Pretium EDGE Solutions and Plug and Play™ Systems housings.





Order Example:

G757524TLZ88U023M 24 fibre MTP-MTP OM3 Pretium EDGE trunk with Universal polarity, 840 mm legs on both ends. 23 metres long, pulling grip on End A outside the drum and protective grip on End B inside the drum

Select the trunk's length (plug-to-plug): replace xxx with 001 to 999; M = metre

Pretium EDGE Trunks			
Fibre Type	**OM3**	**OM4**	**OS2**
Cable Colour	**Aqua**	**Aqua**	**Yellow**
Fibre Count	**Catalogue Number**	**Catalogue Number**	**Catalogue Number**
12	**G757512TLZ88UxxxM**	**G757512QLZ88UxxxM**	**G909012GLZ88UxxxM**
24	**G757524TLZ88UxxxM**	**G757524QLZ88UxxxM**	**G909024GLZ88UxxxM**
48	**G757548TLZ88UxxxM**	**G757548QLZ88UxxxM**	**On request**
72	**G757572TLZ88UxxxM**	**G757572QLZ88UxxxM**	**On request**
96	**G757596TLZ88UxxxM**	**G757596QLZ88UxxxM**	**On request**
144	**G7575E4TLZ88UxxxM**	**G7575E4QLZ88UxxxM**	**G9090E4GLZ88UxxxM**

Pretium EDGE® Universal Modules

Pretium EDGE® modules provide the interface between the MTP® connector on the trunk and the LC duplex jumpers that connect directly into the electronics or as a cross-connect in the main distribution area (MDA). The internal wiring based on universal polarity ensure the correct fibre polarity throughout the entire system independent of how many modules are implemented within the link. Specially designed indents in the shutters ensure that the end faces of the connectors are never touched. In addition, the shutters are visual fault locator (VFL) compatible allowing easy port identification whilst defusing the VFL light to provide adequate eye safety.

Pretium EDGE Universal Modules				
Fibre Type	**OM3**	**OM4**	**OS2**	**Fibre Type**
Connector Type	**Catalogue Number**	**Catalogue Number**	**Catalogue Number**	Adapter Colour Front
PC	**ECM-UM12-05-93T**	**ECM-UM12-05-93Q**	–	Aqua
UPC	–	–	**ECM-UM12-04-89G**	Blue

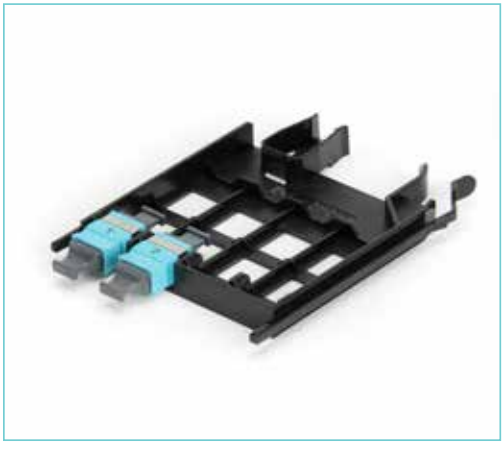
Pretium EDGE® reverse polarity uniboot duplex patch cables allow for the quick and easy conversion from a TIA-568 A-B polarity to a TIA-568 A-A polarity without exposing the fibres or needing any tools. This patch cable comes with a straight-through polarity from the factory, but you can convert it to a flipped cable with no tools. This uniboot design allows one cable to carry both fibres, reducing the cable bulk when routing.

Select the patch cable length (tip-to-tip): replace NBxxxM to NB001M for 1 m up to NB020M for 20 m

	LSZH™ LC Duplex to LC Duplex Uniboot Patch Cable With Reverse Fibre Polarity Option			
	Polarity	Application	Connector	Connector
	Pairwise flipped	All	LC Duplex Uniboot	LC Duplex Uniboot
Fibre Type	**OM3**	**OM4**	**OS2**	**Fibre Type**
Cable Colour	Aqua	Aqua	Yellow	Cable Colour
Connector Type	**Catalogue Number**	**Catalogue Number**	**Catalogue Number**	Connector Colour
PC	E797902TNZ20xxxM	E797902QNZ20xxxM		Aqua
UPC			E787802GNZ20xxxM	Blue
	LSZH SC Duplex to LC Duplex Uniboot Patch Cable With Reverse Fibre Polarity Option			
	Pairwise Flipped	All	SC Duplex	LC Duplex Uniboot
Fibre Type	**OM3**	**OM4**	**OS2**	**Fibre Type**
Cable Colour	Aqua	Aqua	Yellow	Cable Colour
Connector Type	**Catalogue Number**	**Catalogue Number**	**Catalogue Number**	Connector Colour
PC	E577902TNZ20xxxM	E577902QNZ20xxxM		Aqua
UPC			E727802GNZ20xxxM	Blue

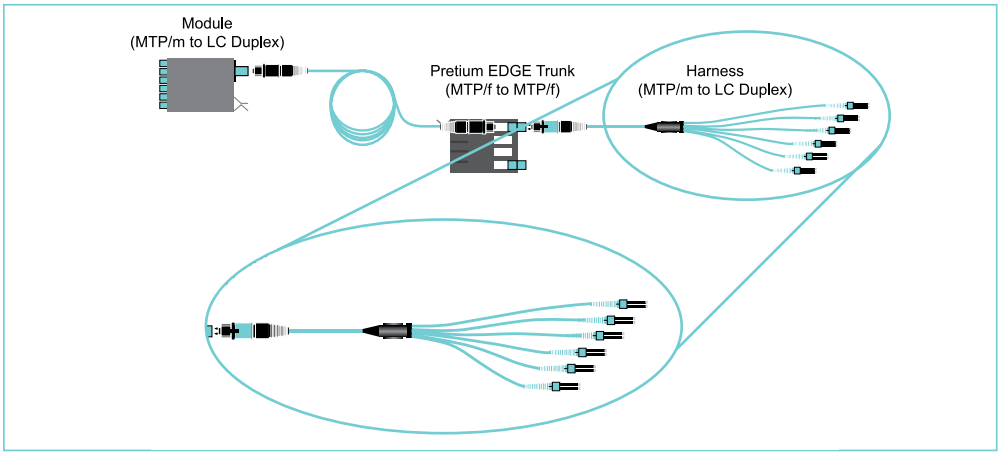
Pretium EDGE® MTP® Adapter Panels

Pretium EDGE® adapter panels are a pass-through patch panel with a single row of MTP® adapters. The backbone trunks connect at the rear of the adapters, and then various options are possible at the front, from end-to-end links with patch cable or harness solutions, or as a cross-connect used in MDA. The MTP adapter panel is the easiest way to implement parallel optic applications in your data centre whilst retaining the existing hardware. All Pretium EDGE adapter panels can be installed from the front or the rear of any Pretium EDGE hardware using a simple release mechanism negating the need for any specialised tools.



Pretium EDGE MTP Adapter Panels			
Fibre Type	**OM3**	**OM4**	**OS2**
MTP Adapters	**Catalogue Number**	**Catalogue Number**	**Catalogue Number**
2	**EDGE-CP24-E3**	**EDGE-CP24-E3**	**EDGE-CP24-90**
4	**EDGE-CP48-E3**	**EDGE-CP48-E3**	**EDGE-CP48-90**
6	**EDGE-CP72-U3**	**EDGE-CP72-U3**	**EDGE-CP72-U1**

The Pretium EDGE® trunk harness is designed to facilitate an interconnect point when the electronics are located in a separate area to the cross-connect or patching field. The harness comes with duplex LC connectors to interface with the electronics and a pinned MTP® connector to connect into a trunk. This can be used in an equipment distribution area (EDA).



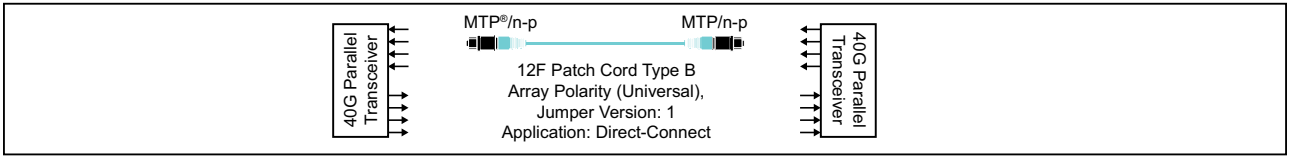
Identification Code	Corning's harness solution provides optimised connector staggering to I/O cards from several active manufacturers	Polarity
1	**Cisco MDS 9513, 9509 and 9506 staggered**	**Universal**
2	**Brocade 48000, DCX and DCX-4S staggered**	**Universal**
3	**Cisco 7010 and 7018 staggered**	**Universal**
4	**Neutral, all legs 150 mm**	**Universal**

Select the harness length (tip-to-tip): Z1650 for 1650 mm or Z2700 for 2700 mm

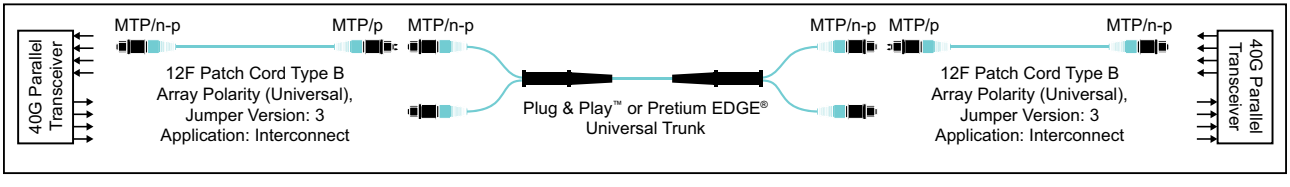
Fibre Type	OM3	OM4	OS2
Cable Colour	**Aqua**	**Aqua**	**Yellow**
Identification Code	**Catalogue Number**	**Catalogue Number**	**Catalogue Number**
1	**H937912TLZ1-Zxxxx**	**H937912QLZ1-Zxxxx**	**H897812GLZ1-Zxxxx**
2	**H937912TLZ2-Zxxxx**	**H937912QLZ2-Zxxxx**	**H897812GLZ2-Zxxxx**
3	**H937912TLZ3-Zxxxx**	**H937912QLZ3-Zxxxx**	**H897812GLZ3-Zxxxx**
4	**H937912TLZ4-Zxxxx**	**H937912QLZ4-Zxxxx**	**H897812GLZ4-Zxxxx**

Standard Pretium EDGE® Trunk Harness MTP® (with pins) to 6x LC Duplex

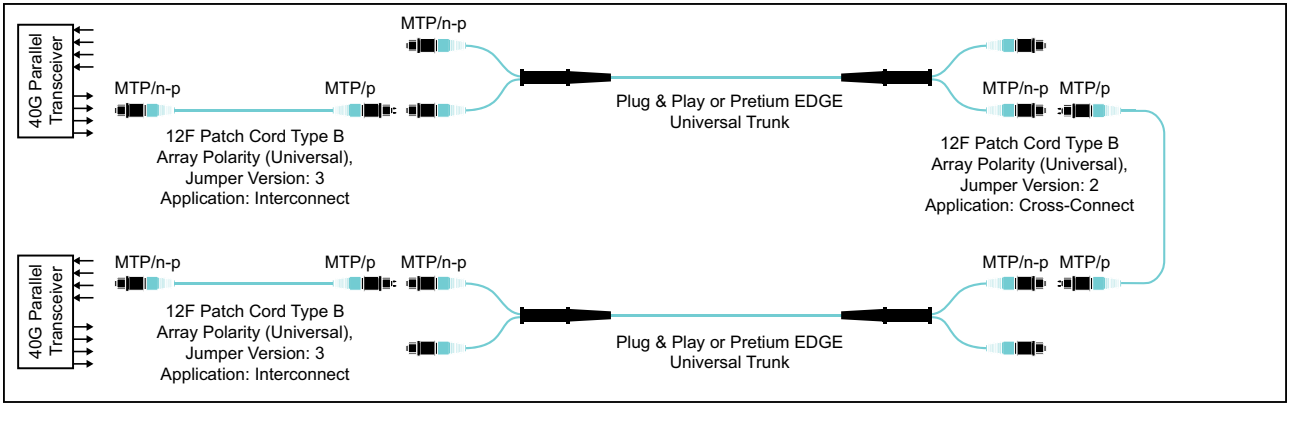
Application: Direct-Connect



Application: Interconnect



Application: Interconnect and Cross-Connect



Pretium EDGE® 40G multimode patch cables allow for the seamless migration to higher data rates in the data centre when used in conjunction with our universal trunks. This patch cable is based around pinned or non-pinned 12-fibre MTP® connectors. Pictured here are the most common applications for this type of patch cables to make ordering easier. All listed patch cables have a TIA-568 Type-B polarity.

Which polarity and configuration MTP patch cable do I need for my 40 Gigabit network?

When deploying MTP patch cable, the following applications and scenarios should be considered:

- Direct-connect: Connection between active parallel optic devices
- Interconnect: Connection from device to patch panel
- Cross-connect: Connection from patch panels to patch panel

Jumper Type	Application	Pin Option	To be Used with Trunk	Patch Cable Polarity
1	Direct-connect	Without pins to without pins	Type B (Universal)	
2	Cross-connect	With pins to with pins	Type B (Universal)	Type B (Universal)
4	Interconnect	With pins to without pins	Type A (Straight)	Type B (Universal)

Select the patch cable length (tip-to-tip): replace NBxxxM to NB001M for 1 m up to NB020M for 20 m

Fibre Type	OM3		OM4		OS2	Fibre Type
Cable Colour	Aqua		Aqua		Yellow	Cable Colour
Jumper Type	Catalogue Number		Catalogue Number		Catalogue Number	Length
1	J757512TEZ-NBxxxM		J757512QEZ-NBxxxM		J909012GEZ-NBxxxM	1 up to 20 m
2	J939312TEZ-NBxxxM		J939312QEZ-NBxxxM		J898912GEZ-NBxxxM	1 up to 20 m
4	J759312TEZ-NBxxxM		J759312QEZ-NBxxxM		J899012GEZ-NBxxxM	1 up to 20 m

Standard Pretium EDGE® Accessories

Description	Description	Description
Pretium EDGE® Solutions Strain-Relief Bracket, CDF, accommodating four Pretium EDGE Solutions clip	Single-fibre Port Cleaner for LC, keyed LC and MU connector end faces for both UPC and APC polishes	Fibre Optic Cleaning Tool for MTP® connectors
Catalogue Number	**Catalogue Number**	**Catalogue Number**
EDGE-CDF-RJ04-BKT	CLEANER-PORT-LC	2104466-01
Units Per Delivery	**Units Per Delivery**	**Units Per Delivery**
1/1	1/1	1/1

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29 Standard Pretium Duplex Patch Cables

30 Pretium Plug & Play Adapter Panels

31 Standard Pretium Plug & Play Trunk Harness MTP® (with pins) to 6x LC Duplex

32 Standard Pretium Plug & Play MTP Patch Cable for Parallel Optic Application

34 Standard Pretium Plug & Play Accessories

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PCH Plug & Play™ Housings

PCH Plug & Play™ housings mount in 19-in racks or cabinets and provide industry-leading density connectivity when combined with Pretium® Plug & Play modules, panels, harnesses, trunks, and patch cords. The housings enable quick deployment of module or panel in the housing. The design of the PCH-M3-01U contains a sliding drawer with integrated patch cable protection and a labelling element on the rear side of the front door. The PCH-04U housing contains an integral hinged jumper manager on the front which can be locked in the "up" position for an additional 1U of horizontal jumper management or left in the default "down" position to provide additional capacity for jumper routing along the top of the housing. Mounting and removal of trunks in both housings is a simple, quick, and tool-less operation enabling rapid deployment. Additional mounting brackets for trunks are shown on the accessory page.

PCH Plug & Play Housings			
Description	Maximum Capacity Plug & Play Module	Maximum Capacity MTP® Panel (Base-12)	**Catalogue Number**
19-in 4U Pretium Plug & Play Housing for up to 12 Plug & Play modules or CCHE adapter panels	144 x LC Duplex ports (288 fibre)	144 x MTP ports (1,728 fibre)	**PCH-04U**
19-in 1U Pretium Plug & Play Housing for up to 3 Plug & Play modules or CCHE adapter panels	36 x LC Duplex ports (72 fibre)	36 x MTP ports (432 fibre)	**PCH-M3-01U**

Pretium® Plug & Play™ MTP® trunks are pre-terminated cables with 12-fibre MTP connectors on either side. The trunks build up the major skeleton of the passive network infrastructure, and thanks to the superior design including Corning® ClearCurve® fibres, they enable rapid deployment for your campus LAN or data centre facility. All trunks are shipped with strain-relief clips that allow for the tool-less installation in Pretium PCH Plug and Play Systems housings.

Order Example:

A696924TDZAA023M 24-fibre MTP-MTP OM3 Plug & Play trunk with Universal polarity, 600 mm legs on both ends. 23 m long, pulling grip on End A outside the drum, and protective grip on End B.

Select the trunk's length (plug-to-plug): replace YYY with 001 to 999; M = metre

Pretium Plug & Play Trunks			
Fibre Type	**OM3**	**OM4**	**OS2**
Cable Colour	**Aqua**	**Aqua**	**Yellow**
Fibre Count	**Catalogue Number**	**Catalogue Number**	**Catalogue Number**
12	**A696912TDZAAUYYYM**	**A696912QDZAAUYYYM**	**A909012RDZAAUYYYM**
24	**A696924TDZAAUYYYM**	**A696924QDZAAUYYYM**	**A909024RDZAAUYYYM**
48	**A696948TUZAAUYYYM**	**A696948QUZAAUYYYM**	**On request**
72	**A696972TUZAAUYYYM**	**A696972QUZAAUYYYM**	**On request**
96	**A696996TUZAAUYYYM**	**A696996QUZAAUYYYM**	**On request**
144	**A6969E4TUZAAUYYYM**	**A6969E4QUZAAUYYYM**	**A9090E4RDZAAUYYYM**

Pretium® Plug & Play™ Universal Modules

Pretium® Plug & Play™ modules provide the interface between the MTP® connector on the trunk and the LC duplex jumpers that connect directly into the electronics or as a cross-connect in the main distribution area (MDA). The internal wiring based on universal polarity ensures the correct fibre polarity throughout the entire system independent of how many modules are implemented within the link. Specially designed indents in the shutters ensure that the end faces of the connectors are never touched. In addition, the shutters are visual fault locator (VFL) compatible allowing easy port identification whilst defusing the VFL light to provide adequate eye safety.

Pretium Plug & Play Universal Modules				
Fibre Type	**OM3**	**OM4**	**OM2**	**Fibre Type**
Connector Type	**Catalogue Number**	**Catalogue Number**	**Catalogue Number**	Adapter Colour Front
PC	**CCH-UM24-05-93T**	**CCH-UM24-05-93Q**	**–**	Aqua
UPC	**–**	**–**	**CCH-UM24-04-89R**	Blue

Pretium® reverse polarity uniboot duplex patch cables allow for the quick and easy conversion from a TIA-568 A-B polarity to a TIA-568 A-A polarity without exposing the fibres or needing any tools. This patch cable comes with a straight-through polarity from the factory, but you can convert it to a flipped cable with no tools. This uniboot design allows one cable to carry both fibres, reducing the cable bulk when routing.

Select the patch cable length (tip-to-tip): replace NBxxxM to NB001M for 1 m up to NB020M for 20 m

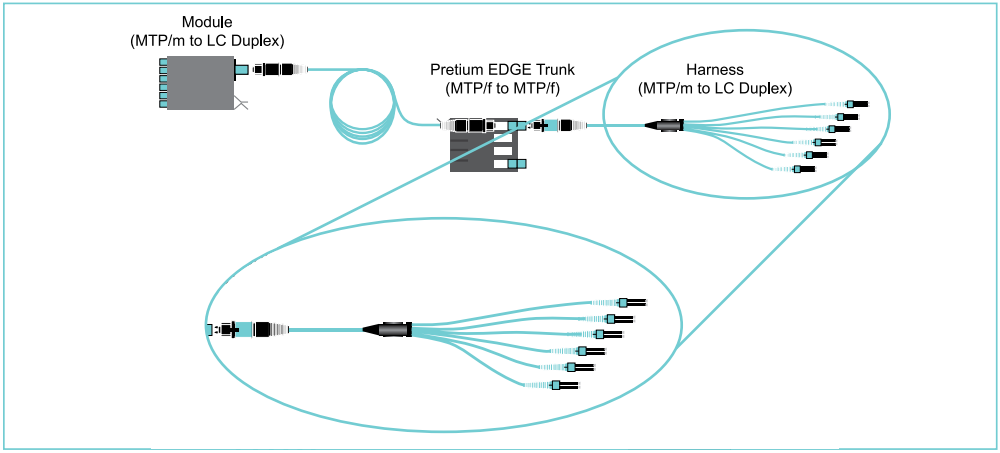
	LSZH™ LC Duplex to LC Duplex Uniboot Patch Cable With Reverse Fibre Polarity Option			
	Polarity	Application	Connector	Connector
	Pairwise Flipped	All	LC Duplex Uniboot	LC Duplex Uniboot
Fibre Type	**OM3**	**OM4**	**OS2**	**Fibre Type**
Cable Colour	Aqua	Aqua	Yellow	Cable Colour
Connector Type	**Catalogue Number**	**Catalogue Number**	**Catalogue Number**	Connector Colour
PC	E797902TNZ20xxxM	E797902QNZ20xxxM		Aqua
UPC			E787802GNZ20xxxM	Blue
	LSZH SC Duplex to LC Duplex Uniboot Patch Cable with Reverse Fibre Polarity Option			
	Pairwise Flipped	All	SC Duplex	LC Duplex Uniboot
Fibre Type	**OM3**	**OM4**	**OS2**	**Fibre Type**
Cable Colour	Aqua	Aqua	Yellow	Cable Colour
Connector Type	**Catalogue Number**	**Catalogue Number**	**Catalogue Number**	Connector Colour
PC	E577902TNZ20xxxM	E577902QNZ20xxxM		Aqua
UPC			E727802GNZ20xxxM	Blue

Pretium® Plug & Play™ Adapter Panels

Pretium EDGE® adapter panels are a pass-through patch panel with a single row of MTP® adapters. The backbone trunks connect at the rear of the adapters, and then various options are possible at the front, from end-to-end links with patch cable or harness solutions, or as a cross-connect used in MDA. The MTP adapter panel is the easiest way to implement parallel optic applications in your data centre whilst retaining the existing hardware. All Pretium® Plug & Play™ adapter panels can be installed from the front or the rear of any Pretium Plug & Play hardware using a simple release mechanism negating the need for any specialised tools.

Pretium Plug & Play Adapter Panels			
Fibre Type	**OM3**	**OM4**	**OM2**
Connector Type	**Catalogue Number**	**Catalogue Number**	**Catalogue Number**
6x MTP	**CCHE-CP72-E3**	**CCHE-CP72-E3**	**CCHE-CP72-89**
8x MTP	**CCHE-CP96-E3**	**CCHE-CP96-E3**	**CCHE-CP96-89**
12x MTP	**CCHE-CPE4-E3**	**CCHE-CPE4-E3**	**CCHE-CPE4-89**
12 LC Duplex	**CCHE-CP24-E4**	**CCHE-CP24-E4**	**CCHE-CP24-04**

The Pretium® Plug & Play™ trunk harness is designed to facilitate an interconnect point when the electronics are located in a separate area to the cross-connect or patching field. The harness comes with duplex LC connectors to interface with the electronics and a pinned MTP® connector to connect into a trunk. This can be used in an equipment distribution area (EDA).

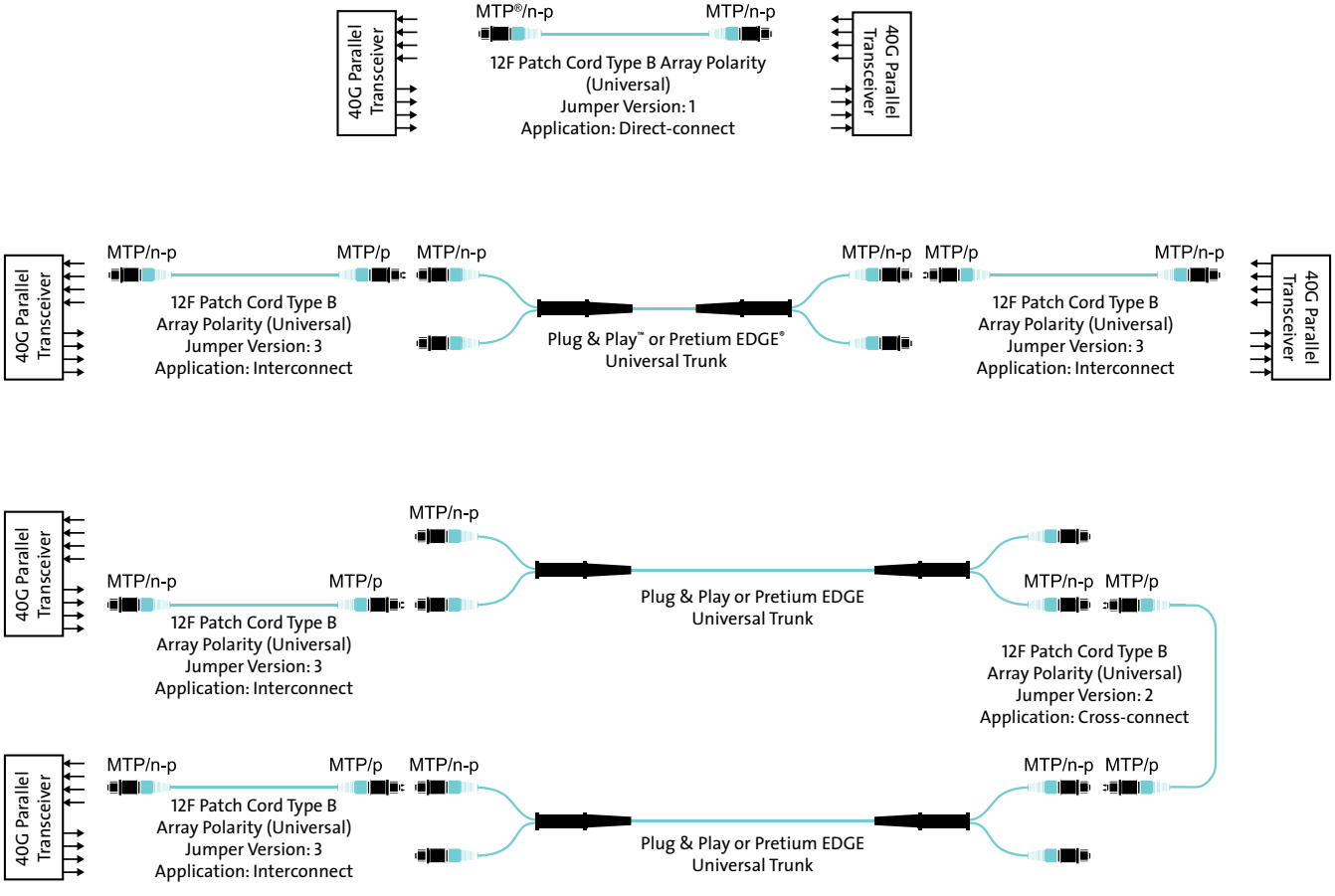


Identification Code	Corning's harness solution provides optimised connector staggering to I/O cards from several active manufacturers	Polarity
1	Cisco MDS 9513, 9509, and 9506 staggered	Universal
2	Brocade 48000, DCX, and DCX-4S staggered	Universal
3	Cisco 7010 and 7018 staggered	Universal
4	Neutral, all legs 150 mm	Universal

Select the harness length (tip-to-tip): Z1650 for 1650 mm or Z2700 for 2700 mm

Fibre Type	OM3	OM4	OS2
Cable Colour	Aqua	Aqua	Yellow
Identification Code	Catalogue Number	Catalogue Number	Catalogue Number
1	H937912TLZ1-Zxxxx	H937912QLZ1-Zxxxx	H897812GLZ1-Zxxxx
2	H937912TLZ2-Zxxxx	H937912QLZ2-Zxxxx	H897812GLZ2-Zxxxx
3	H937912TLZ3-Zxxxx	H937912QLZ3-Zxxxx	H897812GLZ3-Zxxxx
4	H937912TLZ4-Zxxxx	H937912QLZ4-Zxxxx	H897812GLZ4-Zxxxx

Standard Pretium® Plug & Play™ MTP® Patch Cable for Parallel Optic Application



Pretium EDGE® 40G multimode patch cables allow for the seamless migration to higher data rates in the data centre when used in conjunction with our universal trunks. This patch cable is based around pinned or non-pinned 12-fibre MTP® connectors. Pictured here are the most common applications for this type of patch cables to make ordering easier. All listed patch cables have a TIA-568 Type-B polarity.

Which polarity and configuration MTP patch cable do I need for my 40 Gigabit network?

When deploying MTP patch cable, the following applications and scenarios should be considered:

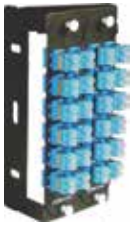
- Direct-connect: Connection between active parallel optic devices
- Interconnect: Connection from device to patch panel
- Cross-connect: Connection from patch panel to patch panel

Jumper Type	Application	Pin Option	To be Used with Trunk	Patch Cable Polarity
1	Direct-connect	Without pins to without pins	Type B (Universal)	
2	Cross-connect	With pins to with pins	Type B (Universal)	Type B (Universal)
4	Interconnect	With pins to without pins	Type A (Straight)	Type B (Universal)

Select the patch cable length (tip-to-tip): replace NBxxxM to NB001M for 1 m up to NB020M for 20 m

Fibre Type	OM3	OM4	OS2	Fibre Type
Cable Colour	Aqua	Aqua	Yellow	Cable Colour
Jumper Type	Catalogue Number	Catalogue Number	Catalogue Number	Length
1	J757512TEZ-NBxxxM	J757512QEZ-NBxxxM	J909012GEZ-NBxxxM	1 up to 20 m
2	J939312TEZ-NBxxxM	J939312QEZ-NBxxxM	J898912GEZ-NBxxxM	1 up to 20 m
4	J759312TEZ-NBxxxM	J759312QEZ-NBxxxM	J899012GEZ-NBxxxM	1 up to 20 m

Standard Pretium® Plug & Play™ Accessories



Description	Catalogue Number	Units Per Delivery
Pretium® Plug & Play™ Solutions Bracket for side installation, accommodating up to two Pretium CCH-modules or CCHE-panels	RBC-02P	1/1

Description	Catalogue Number	Units Per Delivery
Single-fibre Port Cleaner for LC, keyed LC, and MU connector end faces for both UPC and APC polishes	CLEANER-PORT-LC	1/1

Description	Catalogue Number	Units Per Delivery
Fibre Optic Cleaning Tool for MTP® connectors	2104466-01	1/1

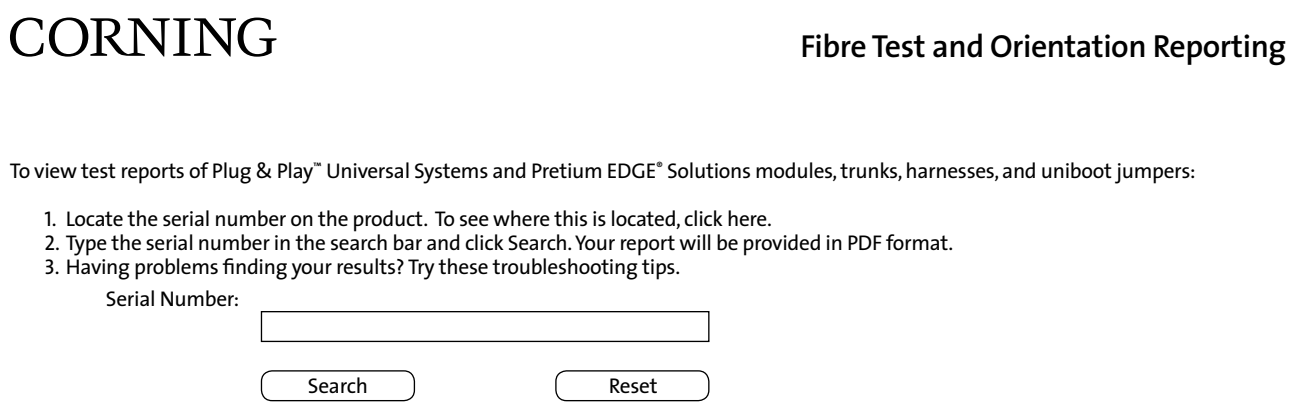
Description	Catalogue Number	Units Per Delivery
Pretium Plug & Play Solutions Strain-Relief Bracket for PCH-4U housings, accommodating up to three Pretium Plug & Play Solutions clips	PC4-RJ04-STR	1/1

Description	Catalogue Number	Units Per Delivery
Pretium Plug & Play Solutions Strain-Relief Bracket, accommodating up to six Pretium Plug & Play Solutions clips	CDF-RJ06-BKT	1/1

Description	Catalogue Number	Units Per Delivery
Pretium Plug & Play Solutions Strain-Relief Bracket, accommodating one Pretium Plug & Play Solutions clip	CDF-RJ-BKT	1/1

Pretium EDGE® and Plug & Play™ Online Test Results

To view test reports for your Plug and Play™ Universal Systems and Pretium EDGE® Solutions equipment, please visit:
https://customer3.corning.com/ftoedge/default.aspx
Simply follow the instructions as shown on the screen shot below.



Transmission

Performance/Insertion Loss

	OM3/OM4	OS2
Optical Fibre Type (µm)	50 Multimode	Single-mode
Wavelength (nm)	850	1310/1550
Maximum Attenuation (dB/km)	2.8	0.4/0.3
Minimum Effective Modal Bandwidth (EMB) (MHz•km)	2000/4700	– / –

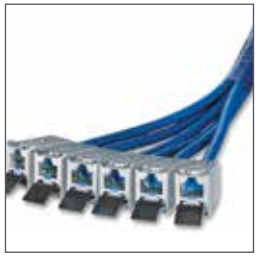
Insertion Loss (dB) Max	OM3/OM4	OS2
Connected Mated Pairs		
LC	0.15	0.5
MTP® connector	0.35	0.75
Modules/Harnesses	0.5	1.25

Ethernet Data Rate	Nomenclature	Fibre Type	Maximum Channel Insertion Loss (dB)	Maximum Link Length (m)
1G	1000BASE-SX	OM3	4.5	1000
10G	10GBASE-SR	OM3/OM4	2.6/2.34	300/550
40G	40GBASE-SR4	OM3/OM4	1.9/1.5	100/150
100G	100GBASE-SR10	OM3/OM4	1.9/1.5	100/150

Fibre Channel Data Rate	Nomenclature	Fibre Type	Maximum Channel Insertion Loss (dB)	Maximum Link Length (m)
4 Gb/s	400-M5E-SN-1 400-M5F-SN-1	OM3 OM4	2.88 3.02	380 420
8 Gb/s	800-M5E-SN-1 800-M5F-SN-1	OM3 OM4	2.19 2.22	150 190
16 Gb/s	1600-M5E-SN-1 1600-M5F-SN-1	OM3 OM4	1.95 1.97	100 125

4G, 8G, 10G, and 16G Fibre Channel Distance Capability and Channel Insertion Loss 12 Fibre MTP® Connectivity						
LANscape® Solutions Cabled Fibre	Data Rate Gb/s	Number of MTP® Connections Distance (m)/Channel Insertion Loss (dB)				
		2	3	4	5	6
Laser-optimised 50/125 µm OM3	4	500/2.27	480/2.43	440/2.62	420/2.78	380/3.04
	8	215/1.40	205/1.62	190/1.91	180/2.08	165/2.32
	10	320/3.01	320/3.01	320/2.85	320/2.85	320/2.85
	16	140/1.17	130/1.45	115/1.65	100/1.95	90/2.11
Laser-optimised 50/125 µm OM4	4	600/2.64	580/2.78	540/2.86	500/3.08	480/3.18
	8	270/1.59	260/1.77	235/2.00	220/2.20	205/2.38
	10	500/2.27	490/2.56	470/2.85	460/3.09	460/3.09
	16	185/1.38	175/1.59	155/1.78	140/2.00	125/2.18

1G, 10G, 40G, and 100G Ethernet Distance Capability and Channel Insertion Loss 12 Fibre MTP Connectivity						
LANscape Solutions Cabled Fibre	Data Rate Gb/s	Number of MTP Connections Distance (m)/Channel Insertion loss (dB)				
		2	3	4	5	6
Laser-optimised 50/125 µm OM3	1	1100/4.14	1000/4.68	1000/4.68	1000/4.68	950/4.89
	10	320/3.01	320/3.01	320/2.85	320/2.85	320/2.85
	40/100	150/1.18	140/1.44	120/1.65	105/1.88	90/2.09
Laser-optimised 50/125 µm OM4	1	1100/4.51	1100/4.51	1050/4.76	1050/4.76	1000/4.97
	10	500/2.27	490/2.56	470/2.85	460/3.09	460/3.09
	40/100	185/1.56	170/1.82	135/2.02	125/2.12	115/2.20



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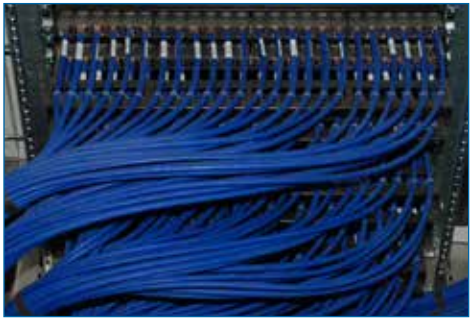
CORNING

Copper Panels

The FutureCom™ patch panels are universal for all 19-in cabinet installations available in black or stainless steel and is intended for flush-mounting installations. This concept allows free choice of application in your data centre with high density. The installation of the module in the panel is quick and easy by simply clicking it into place.



Data Centre Hardware				
Description	Colour	Maximum Capacity	Rack Units	Catalogue Number
19-in LANscape® Solutions Panel, empty	Silver	24 x slots	1U	**WAXWSV-02400-C001**
19-in LANscape Solutions Panel, empty	Black	24 x slots	1U	**WAXWSV-02408-C001**
19-in Angled LANscape Solutions Panel, empty	Silver	24 x slots	1U	**WAXWOV-02400-C001**
19-in Angled LANscape Solutions Panel, empty	Black	24 x slots	1U	**WAXWOV-02408-C001**
19-in High-density LANscape Solutions Panel, empty	Silver	48 x slots	1U	**CAXASV-04800-C001**
19-in High-density LANscape Solutions Panel, empty	Black	48 x slots	1U	**CAXASV-04808-C001**
19-in High-density Angled LANscape Solutions Panel, empty	Silver	48 x slots	1,5U	**WAXWOV-04800-C001**
19-in High-density Angled LANscape Solutions Panel, empty	Black	48 x slots	1,5U	**WAXWOV-04808-C001**

WAXWSV-02408-C001

WAXWOV-02400-C001

CAXASV-04800-C001

WAXWOV-04808-C001

The FutureCom™ EA Plug & Play™ cabling solution is terminated with modules or connectors and is specified for applications up to 500 MHz. The combination of high-end copper cable with pre-terminated connectivity guarantees high-system margins for the complete cable link according to Class EA. The advantages of a preassembled system cable are reduced assembly costs, reduced installation time, and the elimination of assembly mistakes as well as the guarantee of consistent superior quality.

FutureCom EA 6-Way Plug & Play Trunks

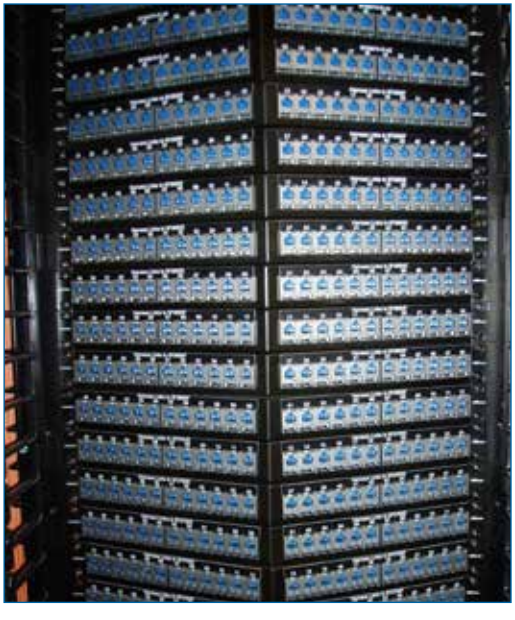
Solution	Links	Catalogue Number	Description	Core Characteristics	Side A	Side B	Category
EA Trunk	6	**CCAADA-F2673-AXXX-C0**	FutureCom EA Plug & Play Solution, Cat. 6A	FRNC	S500	S500	6A
EXAMPLE	6	**CCAADA-F2673-A150-C0**	FutureCom EA, 6-way, Cat. 6A, Plug & Play, trunk. 6 x 4 pair with overall LSZH™ sheath, both ends terminated with S500 Cat. 6A modules, 15 m long	Highest flexibility Smallest diameter Lowest fire rate			
EA Trunk	6	**CCAADB-F2673-AXXX-EN**	FutureCom EA Plug & Play Solution, Cat. 6A	FRNC	S500	S500	6A
EXAMPLE	6	**CCAADB-F2673-A150-EN**	FutureCom EA, 6-way, S/FTP, Cat. 6A, Plug & Play trunk. 6 x 4 pair S/FTP individual cables bound with overall nylon yarn, both ends terminated with S500 Cat. 6A modules, 15 m long	Good flexibility Small diameter Low fire rate			

FutureCom EA Simplex Plug & Play Trunks

Solution	Links	Catalogue Number	Description	Core Characteristics	Side A	Side B	Category
EA Trunk	1	**CCAADB-F2073-AXXX-C0**	FutureCom EA Plug & Play Solution, Cat. 6A	FRNC	S500	S500	6A
EXAMPLE	1	**CCAADB-F2073-A150-C0**	FutureCom EA, simplex, S/FTP, Cat. 6A, Plug & Play trunk. Single S/FTP, both ends terminated with S500 Cat. 6A modules, 15 m long	Good flexibilty Low fire rate			
EA Trunk	1	**CCAAGB-F1072-AXXX-C0**	FutureCom EA Plug & Play Solution, Cat. 6A	FRNC	S500	RJ-45	6A
EXAMPLE	1	**CCAAGB-F1072-A050-C0**	FutureCom EA, simplex, flex S/FTP, Cat. 6A, Plug & Play trunk. Single flex S/FTP cable (high flexibility patch cord cable), one end terminated with an S500 Cat. 6A module and the other with an RJ-45 jack	High flexibilty Low fire rate			

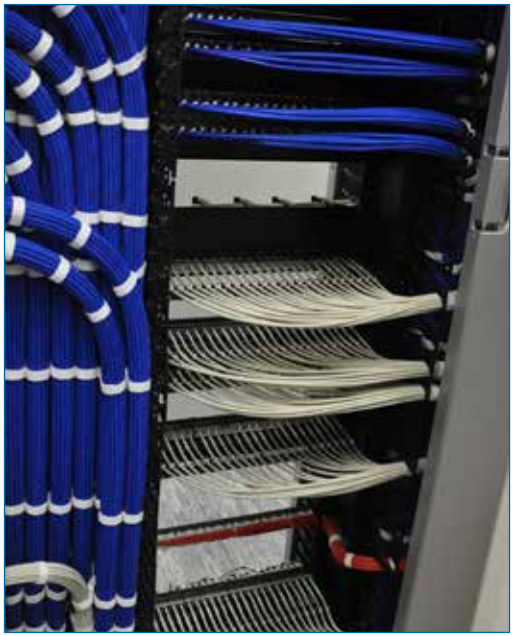
Copper Modules

The FutureCom™ EA cabling solution is based on the S500 Module offering high-system margins for the transmission of digital data signals, compliant with Class EA and is fully supported by power-over-Ethernet Plus (PoE+). The integrated, flexible dust cover may be easily removed, if desired and serves as protection for unused ports. Different cable routing for various installation challenges is possible with the variable cable entry for 0 degrees and 90 degrees.



Copper Termination Modules				
Solution	Type	Description	Category	Catalogue Number
FutureCom EA	S500	Corning FutureCom EA S500 Cat. 6A Module, 1 x RJ-45 Cat. 6A, shielded, with dust cover, LANscape® Solutions footprint	6A	**CAXASM-00104-C001**
FutureCom EA	S500	Corning FutureCom EA S500 Cat. 6A Flex Module, 1 x RJ-45 Cat. 6A, shielded, with dust cover, for flex cable, LANscape Solutions footprint	6A	**CAXASM-00104-C002**
FutureCom EA	S500	Corning FutureCom EA S500 Cat. 6A Keystone Module, 1 x RJ-45 Cat. 6A, shielded, with dust cover, Keystone footprint	6A	**CAXBSM-00104-C001**
FutureCom EA	S500	Corning FutureCom EA S500 Cat. 6A Keystone Flex Module, 1 x RJ-45 Cat. 6A, shielded, with dust cover, for flex cable, Keystone footprint	6A	**CAXBSM-00104-C002**

FutureCom™ cables are low-skew products, i.e. the difference in propagation delay between the individual pairs is very low. This is increasingly being requested for 1/10 Gigabit Ethernet. The suitability of the cable for high-bit-rate transmission systems ensures a high degree of future readiness Additional features are the slim design and low weight of the cables. Each pair is individually shielded with foil (Foil Twisted Pair – FTP).



Data Centre Cable					
Solution	Type	Description	Reel Length	Category	**Catalogue Number**
FutureCom EA	S/FTP	FutureCom EA, S/FTP 550/23, LSOH-3 cable: 550 MHz, AWG 23, 4 pairs, blue, FRNC	1000 m	6A	**CCXEDR-D0047-C003-L7**
FutureCom F	S/FTP	FutureCom F, S/FTP 800/23, LSOH-3 cable: 800 MHz, AWG 23, 4 pairs, blue, FRNC	1000 m	7	**CCXEDB-F0047-C001-L7**
FutureCom FA	S/FTP	FutureCom FA, S/FTP 1200/22, LSOH-3 cable: 1200 MHz, AWG 22, 4 pairs, blue, FRNC	1000 m	8	**CCXFCB-L0047-C001-L7**

Copper Patch Cords

The FutureCom™ EA S/FTP flex/26 patch cord is terminated with IEC 60603-7-51 standards-compliant RJ-45 connectors. The patch cords are designed for the transmission of digital data signals including future applications in 10GbE systems compliant with Class EA (ISO/IEC 11801 AMD: 1 2008 & AMD: 2 2010), Cat. 6A (ANSI/TIA/EIA 568B.2-10) and IEEE 802.3an standards. The patch cords support power-over-Ethernet (PoE) applications in compliance with IEEE 802.3af (2003) and power-over-Ethernet plus (PoE+).

CCAAGB-G1002

CCAAGB-G2002

Data Centre Copper Patch Cords: CAT 6A											
Performance		Colours		Lengths							
Class E	Class EA	Grey	Blue	1 m	2 m	3 m	4 m	5 m	10 m	Description	Catalogue Number
	■	■		■						1 m Cat. 6A Shielded Copper Patch Cord (RJ-45-RJ-45), grey	CCAAGB-G1002-A010-C0
	■	■			■					2 m Cat. 6A Shielded Copper Patch Cord (RJ-45-RJ-45), grey	CCAAGB-G1002-A020-C0
	■	■				■				3 m Cat. 6A Shielded Copper Patch Cord (RJ-45-RJ-45), grey	CCAAGB-G1002-A030-C0
	■	■					■			4 m Cat. 6A Shielded Copper Patch Cord (RJ-45-RJ-45), grey	CCAAGB-G1002-A040-C0
	■	■						■		5 m Cat. 6A Shielded Copper Patch Cord (RJ-45-RJ-45), grey	CCAAGB-G1002-A050-C0
	■	■							■	10 m Cat. 6A Shielded Copper Patch Cord (RJ-45-RJ-45), grey	CCAAGB-G1002-A100-C0
	■		■	■						1 m Cat. 6A Shielded Copper Patch Cord (RJ-45-RJ-45), blue	CCAAGB-G2002-A010-C0
	■		■		■					2 m Cat. 6A Shielded Copper Patch Cord (RJ-45-RJ-45), blue	CCAAGB-G2002-A020-C0
	■		■			■				3 m Cat. 6A Shielded Copper Patch Cord (RJ-45-RJ-45), blue	CCAAGB-G2002-A030-C0
	■		■				■			4 m Cat. 6A Shielded Copper Patch Cord (RJ-45-RJ-45), blue	CCAAGB-G2002-A040-C0
	■		■					■		5 m Cat. 6A Shielded Copper Patch Cord (RJ-45-RJ-45), blue	CCAAGB-G2002-A050-C0
	■		■						■	10 m Cat. 6A Shielded Copper Patch Cord (RJ-45-RJ-45), blue	CCAAGB-G2002-A100-C0

Additional colours and lengths available upon request.

Description	Catalogue Number
Copper Cable Management	
1U Patch Cable Management Panel, black	**WAXWSW-00008-C007**
1U Patch Cable Guides (left and right), black	**WAXWSW-00008-C006**
1.5U Patch Cable Guides (left and right), black	**WAXWSW-00008-C010**
1U Patch Cable Management Panel, silver	**WAXWSW-00000-C007**
1U Patch Cable Guides (left and right), silver	**WAXWSW-00000-C006**
1.5U Patch Cable Guides (left and right), silver	**WAXWSW-00000-C010**
Self-adhesive Labeling Windows, including paper strips (pack of 10)	**LANS-LBL-WNDW**

Description	Catalogue Number
Copper Tools and Consumables	
Assembly Tool for all FutureCom™ copper jacks	**CAXCSN-00000-C010**
Copper Conducting Tape (needed for S10TENe/S500 jacks)	**CAXCSN-00000-C011**
Release Tool For FutureCom modules	**CAXCSN-00000-C012**
Cable Sheath Cutting Tool	**CAXFSN-00000-C001**

WAXWSW-00008-C007

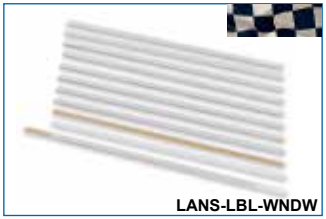
WAXWSW-00008-C006

WAXWSW-00008-C010

WAXWSW-00000-C007

WAXWSW-00000-C006

WAXWSW-00000-C010


LANS-LBL-WNDW

CAXCSN-00000-C010

CAXCSN-00000-C011

CAXCSN-00000-C012

CAXFSN-00000-C001

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Telephone: 00800 2676 4641 • Email: emea.cs@corning.com

If you are interested in purchasing products or just want to chat about an upcoming project, our sales development team in your area is happy to help.

Online Resource Library

www.corning.com/opcomm/resourcelibrary

Our online resource library gives you all the technical information you need, from specifications to installation videos to tutorials, all in one easy, central location at your fingertips.

Events

www.corning.com/opcomm/emea

Corning loves to welcome you to our free-of-charge customer events throughout the whole EMEA region. You can find upcoming events on our home page.

Installers and Distributors

www.corning.com/opcomm/emea/npi/
www.corning.com/opcomm/auth/emea/en

Corning works in close cooperation with a wide range of qualified intermediaries including installers, distributors, and network design planners throughout Europe, the Middle East, and Africa (EMEA). The skills of each are recognised with our framework of accreditation programmes.

LANscape® Training

www.corning.com/opcomm/lanscape/emea/en/

From many years of practical experience, our trainers know which knowledge and skills are required for each task, and they are in constant contact with development, sales, and project engineering teams at Corning.

Customer Care

Telephone: 00800 2676 4641 • Email: emea.cs@corning.com

This is no generic call centre – our customer care representatives are technically trained and work closely with our engineers to understand and support our customers' needs.

Questions or Comments

emea.cs@corning.com

Are you interested in our catalogue for Local Area Networks Core Products or additional printed copies of this book? Please call or write to us:

Telephone: 00 800 2676 4641
emea.cs@corning.com
www.corning.com/opcomm/emea

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