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PRODUCT CATALOG 2017

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DATA CENTER

Category 8 Channel

EXPRESS NETWORKING SOLUTIONS
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EPCT CORPORATION

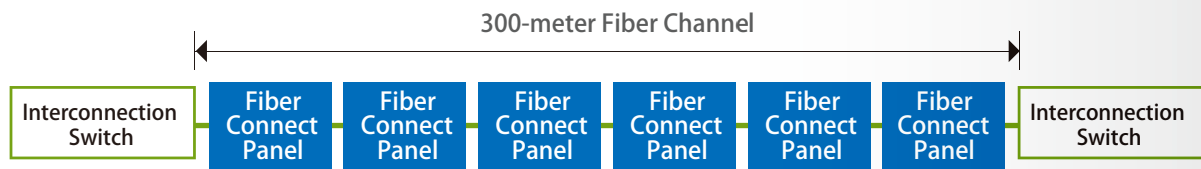
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PRODUCT CATEGORIES

- Fiber Optic System • Category 8 Solution • Field Termination Plug • Keystone Jack
- In-Line Coupler • Patch Panel • Trunk • Patch Cord • Cable • Easy Tool
- Cable Management

Fiber Optic Loss Budgets Calculation



10G LC OM3 300Mtr Channel with 6 Connections

Total Optimized MM Connector Loss:	6 x 0.15dB/connector= 0.90 dB
OM3 Cable Loss:	300 m x 3.5dB/km = 1.05 dB
Total	1.95 dB < Max. 2.6dB

*Per IEEE802.3ae, a 10GBASE Channel over OM3 fiber has a Max. 300Mtr with Max. loss 2.6dB

10G LC OS2 300Mtr Channel with 6 Connections

Total Optimized SM Connector Loss:	6 x 0.15dB/connector= 0.90 dB
OS2 Cable Loss:	300 m x 0.25dB/km = 0.08 dB
Total	0.98 dB < Max. 1.6dB

*Per IEEE802.3ae, a 10GBASE Channel over OS2 fiber has a Max. 300Mtr with Max. loss 1.6dB



40G MTP OM3 100Mtr Channel with 4 Connections

Total Optimized MM Connector Loss:	4 x 0.35dB/connector= 1.40 dB
OM3 Cable Loss:	100 m x 2.2dB/km = 0.22 dB
Total	1.62 dB < Max. 1.9 dB

*Per IEEE802.3ba, a 40GBASE Channel over OM3 fiber has a Max. 100Mtr with Max. loss 1.9dB

100G MTP OM4 150Mtr Channel with 3 Connections

Total optimized Connector Loss:	3 x 0.35dB/connector= 1.05 dB
OM4 Cable Loss:	150 m x 2.2dB/km = 0.33 dB
Total	1.38 dB < Max. 1.5 dB

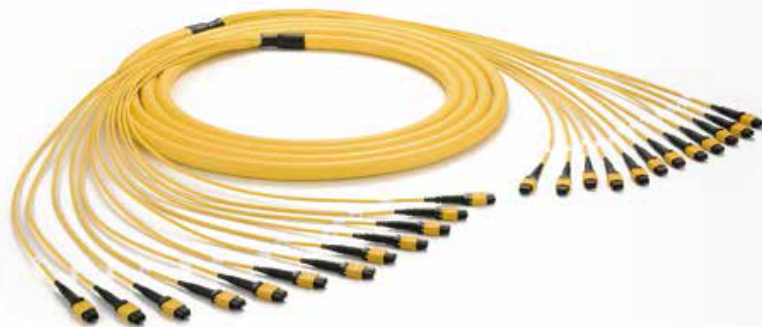
*Per IEEE802.3ba, a 100GBASE Channel over OM4 fiber has a Max. 150Mtr with Max. loss 1.5dB

	10G	40G	100G
Approach	10G	10G X 4	10G X 10
Max. Distance	OM3: 300M (850nm) OM4: 550M (850nm) SMF: 10KM (1310nm)	OM3: 100M (850nm) OM4: 150M (850nm) SMF: 10KM (1310nm)	OM3: 100M (850nm) OM4: 150M (850nm) SMF: 10KM (1310nm)

USCONEC Certification



MTP Trunk Cable Assembly



- Polarity A, B, C and customized are welcome
- 100% factory terminated and tested
- 8, 12, 24, 36, 48 cores... up to 144 cores are available
- Options with OM3, OM4 bend-insensitive fiber and OS2 G.657A
- Flexible micro cable reduced weight and carriage costs
- Parallel Optic Transmission Over 40G / 100G / 400G Ethernet
- “Plug and Play” solution eliminates in-filed termination, reduces installation cost and time

Transmission Performance

MTP mated pair	OM3 LOMMF		OM4 LOMMF		OS2 G.657A	
	Standard	Low Loss	Standard	Low Loss	Standard	Low Loss
Insertion Loss	< 0.5dB	< 0.35dB	< 0.5dB	< 0.35dB	< 0.75dB	< 0.35dB
Return Loss	> 20dB	> 25dB	> 20dB	> 25dB	> 60dB	> 60dB

Parallel Optic Transmission Over 40G / 100G / 400G Ethernet



MTP Y Cable Assembly



- StandardPolarity and customized are welcome
- 100% factory terminated and tested
- 1x24F to 2x12F / 1x24F to 3x8F / 2x12F to 3x8F are available
- Options with OM3, OM4 bend-insensitive fiber and OS2 G.657A
- Flexible micro cable reduced weight and carriage costs

Transmission Performance

MTP mated pair	OM3 LOMMF		OM4 LOMMF		OS2 G.657A	
	Standard	Low Loss	Standard	Low Loss	Standard	Low Loss
Insertion Loss	< 0.5dB	< 0.35dB	< 0.5dB	< 0.35dB	< 0.75dB	< 0.35dB
Return Loss	> 20dB	> 25dB	> 20dB	> 25dB	> 60dB	> 60dB

1x24F to 2x12F

End A Position	Fiber Color	End B Position
1	Blue	1
2	Orange	2
3	Green	3
4	Brown	4
5	Gray	5
6	White	6
7	Red	7
8	Black	8
9	Yellow	9
10	Purple	10
11	Pink	11
12	Aqua	12
13	Blue	1
14	Orange	2
15	Green	3
16	Brown	4
17	Gray	5
18	White	6
19	Red	7
20	Black	8
21	Yellow	9
22	Purple	10
23	Pink	11
24	Aqua	12

1x24F to 3x8F

End A Position	Fiber Color	End B Position
1	Blue	1
2	Orange	2
3	Green	3
4	Brown	4
5	Gray	1
6	White	2
7	Red	3
8	Black	4
9	Yellow	1
10	Purple	2
11	Pink	3
12	Aqua	4
13	Blue	12
14	Orange	11
15	Green	10
16	Brown	9
17	Gray	12
18	White	11
19	Red	10
20	Black	9
21	Yellow	12
22	Purple	11
23	Pink	10
24	Aqua	9

2x12F to 3x8F

End A Position	Fiber Color	End B Position
1	Blue	12
2	Orange	11
3	Green	10
4	Brown	9
5	Gray	4
6	White	3
7	Red	2
8	Black	1
9	Yellow	12
10	Purple	11
11	Pink	10
12	Aqua	9
1	Blue	4
2	Orange	3
3	Green	2
4	Brown	1
5	Gray	12
6	White	11
7	Red	10
8	Black	9
9	Yellow	4
10	Purple	3
11	Pink	2
12	Aqua	1

MTP to LC Harness Assembly

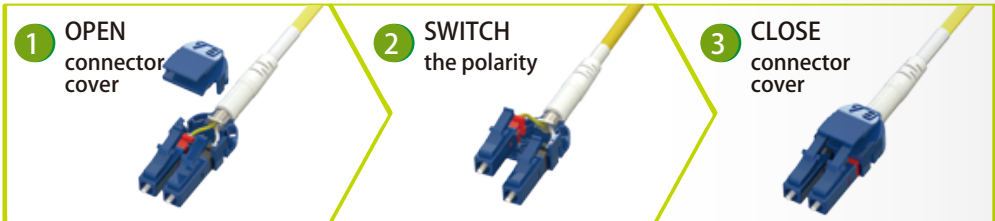


- UniBoot LC is polarity switchable design
- Half tube counts are ease of cable management
- 1x12C MTP to 6xLC uniboot / 1x12C MTP to 4xLC uniboot / 1x24C MTP to 10xLC uniboot are available
- 100% Factory terminated and tested
- Options with OM3, OM4 bend-insensitive fiber and OS2 G.657A

Transmission Performance

Harness	Muntimode			Single mode		
	Insertion Loss		Return Loss	Insertion Loss		Return Loss
	Standard loss	Low Loss		Standard loss	Low Loss	
LC	< 0.3 dB	< 0.15 dB	> 35 dB	< 0.2 dB	< 0.15 dB	> 55 dB
MTP	< 0.5 dB	< 0.35 dB	> 20 dB	< 0.75 dB	< 0.35 dB	> 60 dB

Switch Polarity



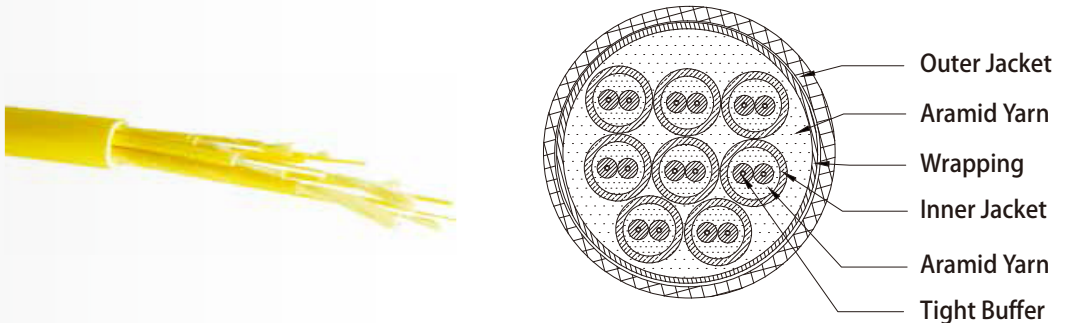
Bundled Multi-Cable LC Assembly



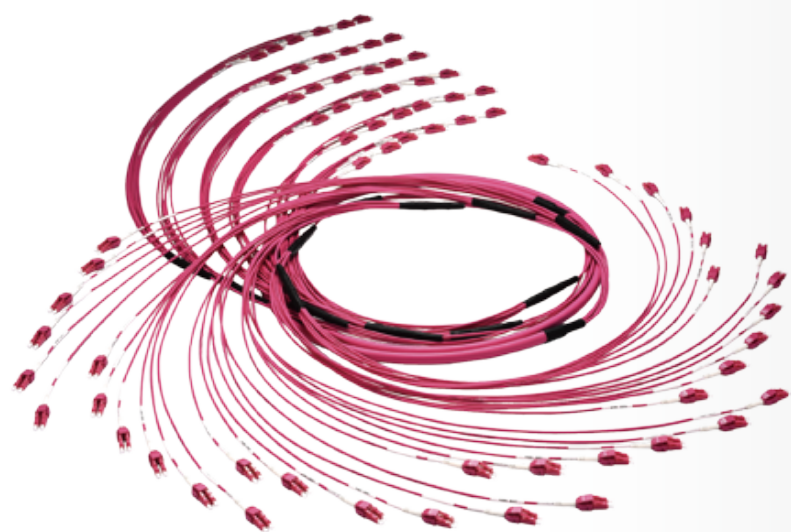
- Uniboot LC is polarity switchable design
- Red/Black color indication for polarity check
- 100% Factory terminated and tested
- Options with OM3, OM4 bend-insensitive fiber and OS2 G.657A
- 6, 8, 12cores... up to 24 cores are available with PVC outer jacket
- More than 24 cores bundled cable will be with Nylon sheath
- Bundled cable solution comes with breakout tubing length > 2.5M

Transmission Performance

LC mated pair	300M/10G OM3		550M/10G OM4		10KM/10G OS2	
	Standard	Low Loss	Standard	Low Loss	Standard	Low Loss
Insertion Loss	< 0.3dB	< 0.15dB	< 0.3dB	< 0.15dB	< 0.2dB	< 0.15dB
Return Loss	> 35dB	> 40dB	> 35dB	> 40dB	> 55dB	> 55dB



UniBoot LC MicroCable Assembly

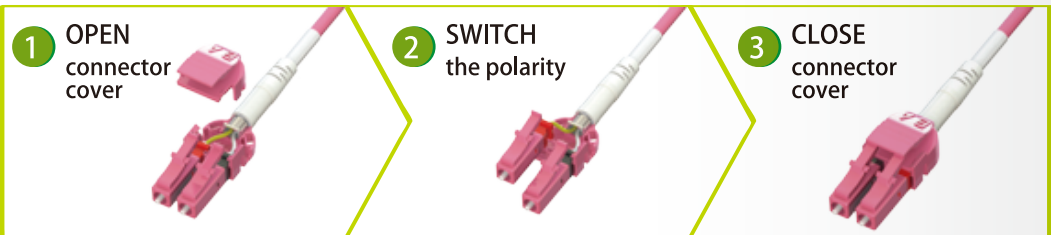


- Uniboot LC is polarity switchable design
- Red/Black color indication for polarity check
- 100% Factory terminated and tested
- Half tube counts are ease of cable management
- Flexible microcable reduced weight and carriage costs
- 2, 8, 12, 24, 36, 48 cores... up to 144 cores are available
- Options with OM3, OM4 bend-insensitive fiber and OS2 G.657A
- Breakout tubing Length Max. 2.5M.

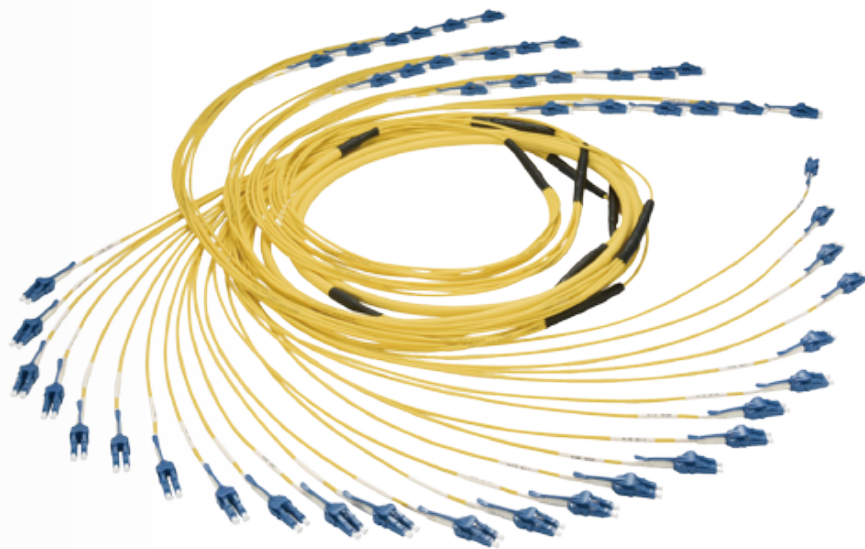
Transmission Performance

LC mated pair	300M/10G OM3		550M/10G OM4		10KM/10G OS2	
	Standard	Low Loss	Standard	Low Loss	Standard	Low Loss
Insertion Loss	< 0.3dB	< 0.15dB	< 0.3dB	< 0.15dB	< 0.2dB	< 0.15dB
Return Loss	> 35dB	> 40dB	> 35dB	> 40dB	> 55dB	> 55dB

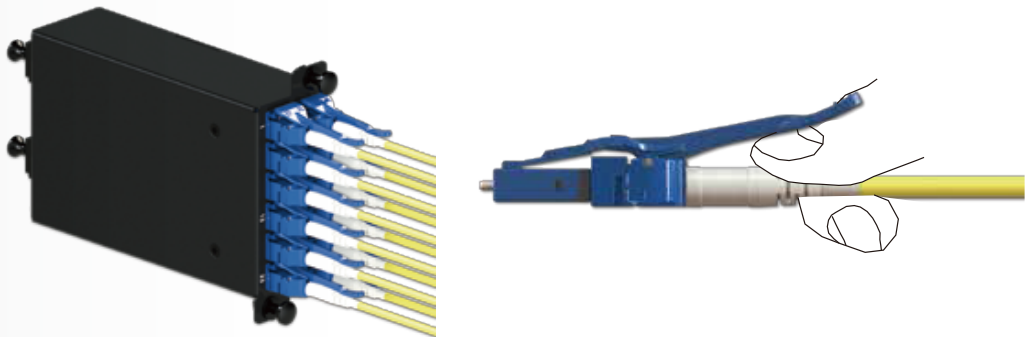
Switch Polarity



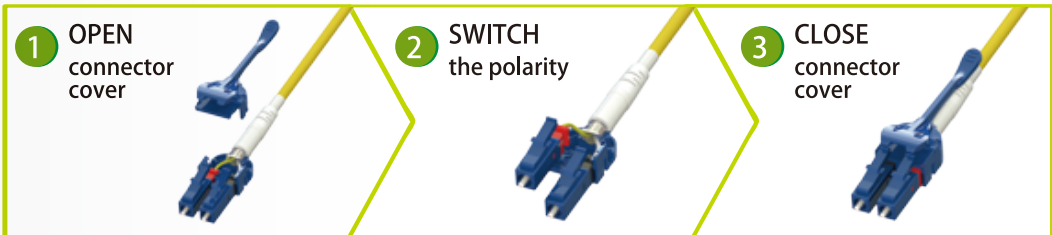
Extractor LC MicroCable Assembly



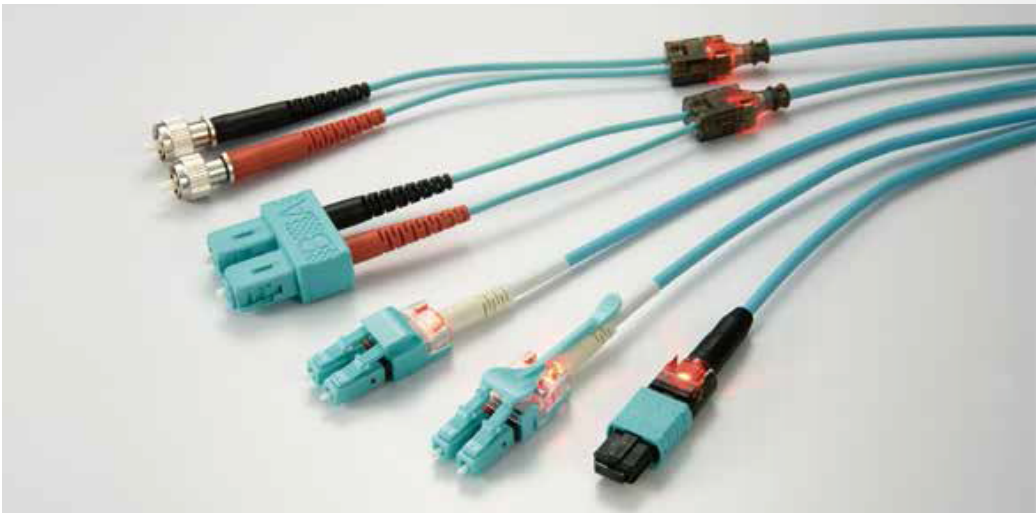
- Seesaw tab design makes LC connector easy extraction in high density construction
- Extractor LC is polarity switchable design
- Red/Black color indication for polarity check
- 100% Factory terminated and tested
- Half tube counts are ease of cable management
- 2, 8, 12, 24, 36, 48 cores... up to 144 cores are available
- Options with OM3, OM4 bend-insensitive fiber and OS2 G.657A
- Breakout tubing length Max. 2.5M.



Switch Polarity



Owl-Eyed Identification System

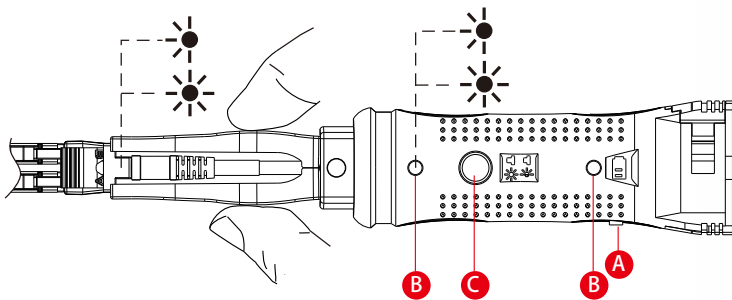


- Easily identify the termination point to the other
- Make trouble shooting easier
- Visually trace individual patch cord without pulling or affecting the patch cord
- LC Seesaw tab design makes easily access and removal in high density fiber patching environment
- Polarity switchable design in SC and LC
- Red / Black color indication for polarity check

Transmission Performance

LC mated pair	300M/10G OM3		550M/10G OM4		10KM/10G OS2	
	Standard	Low Loss	Standard	Low Loss	Standard	Low Loss
Insertion Loss	< 0.3dB	< 0.15dB	< 0.3dB	< 0.15dB	< 0.2dB	< 0.15dB
Return Loss	> 35dB	> 40dB	> 35dB	> 40dB	> 55dB	> 55dB

Power Source



- A. Power ON / OFF
- B. Power Indicator light.
- Green: power is on.
 - Red: power is running low.
 - Inoperative: please replace battery.
- C. Power Switch → two modes available.
- ⚡ light indicator flashes rapidly
 - ⚡ light indicator remains on
- Battery 4 pcs, A76 1.5V (LR44)

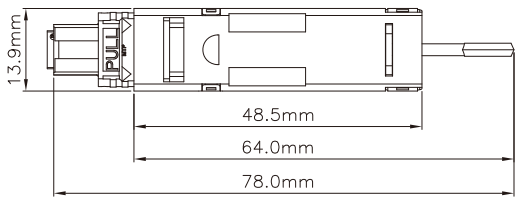
Loop Back

Fiber loop back provide an economical solution for a number of fiber optic test applications. These loop back cables offer a generous manageable fiber loop virtually eliminating bend loss. Each cable is functionally tested before shipping and is covered by a lifetime warranty. For MTP, device burn-in and loopback testing for network cards and QSFP modules. A signal loop from transceiver to receiver is within one MTP. Loopback includes SC, LC and 12C / 24C MTP connector types, allows testing of optical network segment by segment.

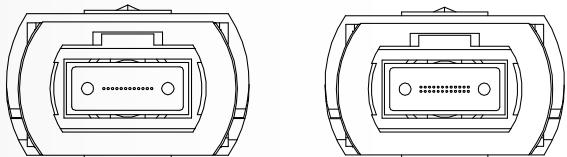


Transmission Performance

Insertion Loss	Multimode	Singlemode
MTP	< 1.5 dB	< 1.5 dB
LC / SC	< 0.5 dB	< 0.3 dB

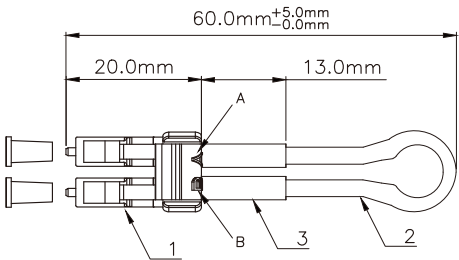
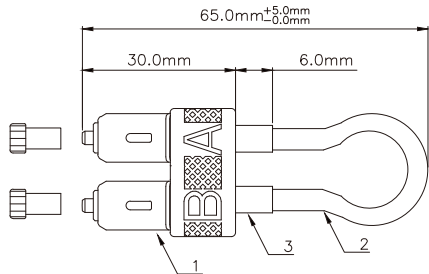


MTP Polarity



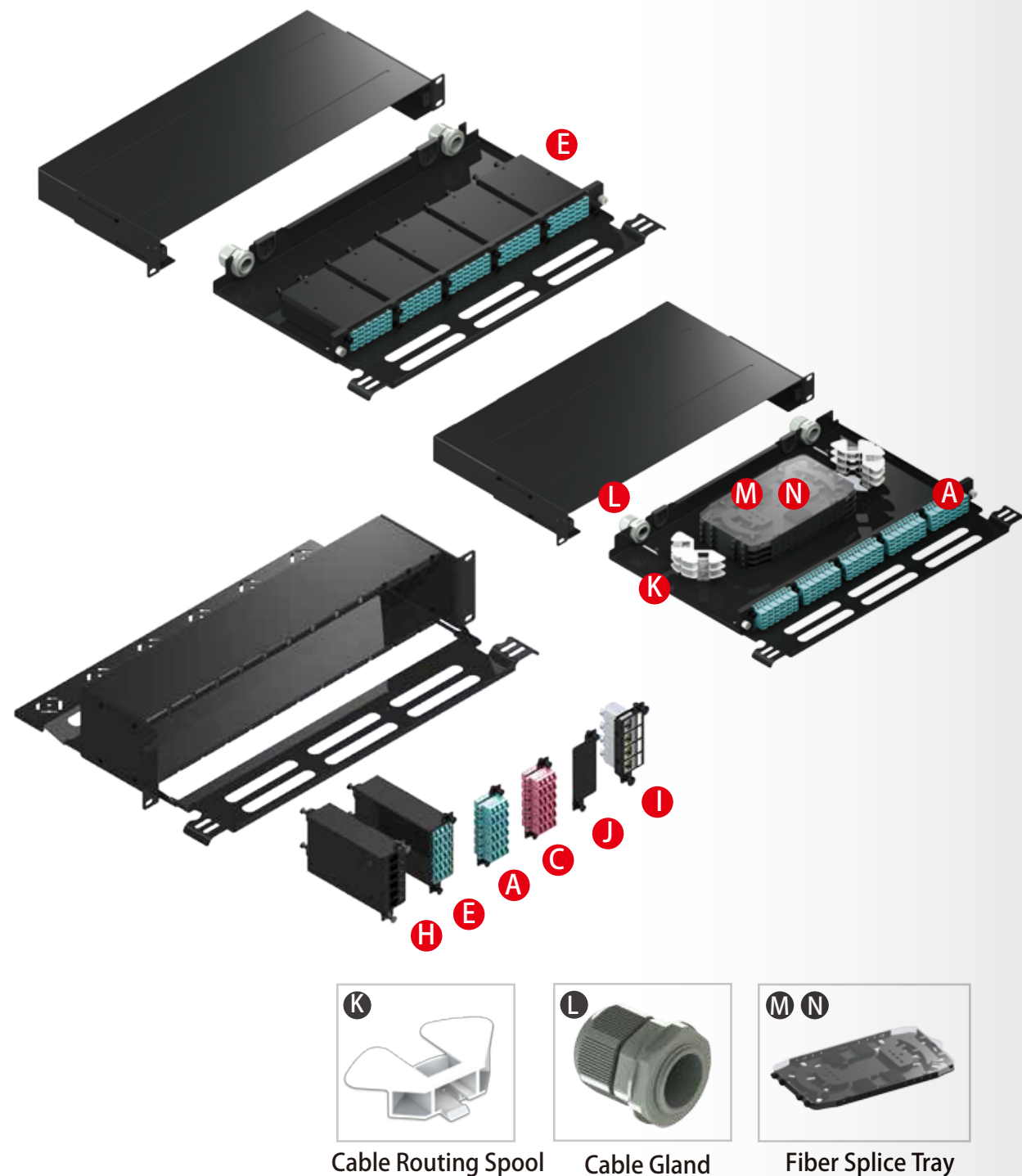
Channel	Standrd Fiber Number
01	to 12
02	to 11
03	to 10
04	to 09
05	to 08
06	to 07

Channel	Standrd Fiber Number
01	to 13
02	to 14
03	to 15
04	to 16
05	to 17
06	to 18
07	to 19
08	to 20
09	to 21
10	to 22
11	to 23
12	to 24



Multi-Function HD Fiber Patch Panel

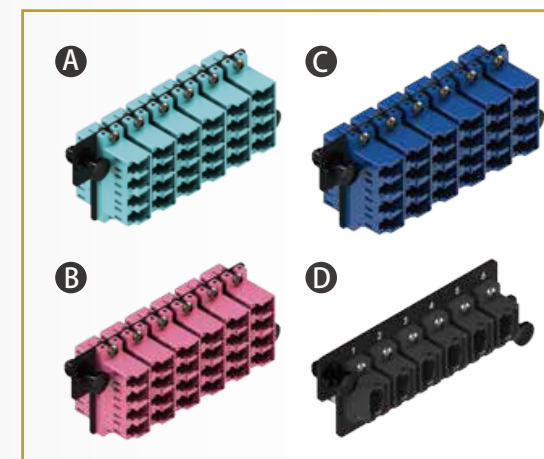
Multi-Function high density fiber patch panel is constructed by flexible design to achieve diversified applications, like in-field fiber termination, pre-termination fiber cassette and RJ45 keystone termination. The maximum port number of 1U multi-function fiber patch panel is up to 120 ports.



Cable Routing Spool

Cable Gland

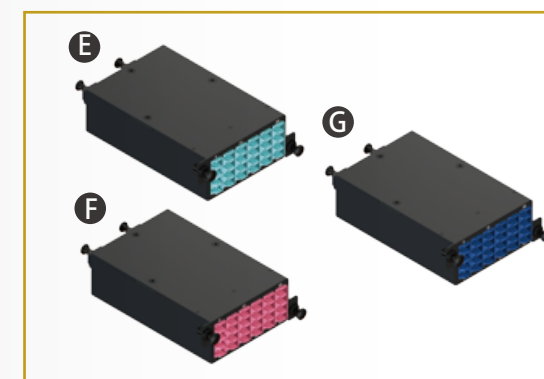
Fiber Splice Tray



24C LC Adaptor Panels

- 6 Quad LC adaptors
- Plug & Play for fast installation
- Ceramic sleeve for OM3, OM4 and SM
- Insertion loss < 0.2dB

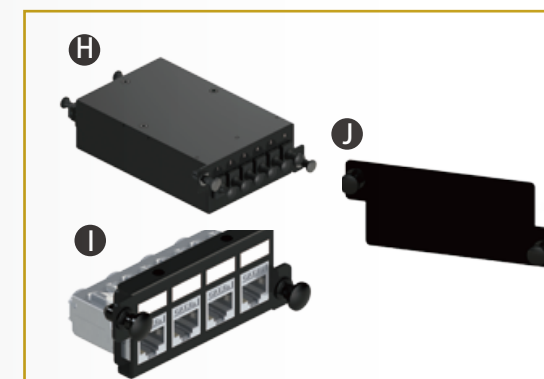
A. OM3 Aqua adaptor
B. OM4 Violet adaptor
C. SM Blue adaptor
D. MTP Adaptor



24C MTP-LC Cassettes

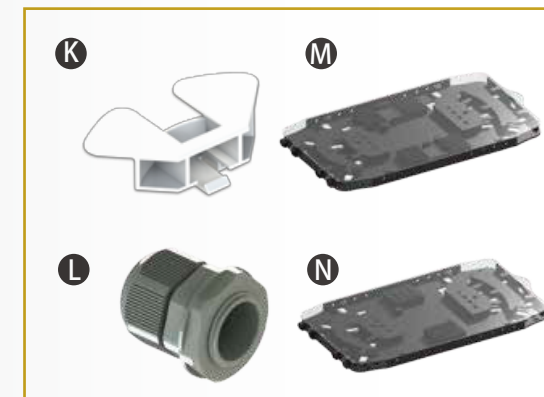
- 6 x Quad LC adaptors
- 2 x MTP adaptors
- 2 x 12F MTP-LC Harness
- 100% factory terminated and tested
- Low Insertion loss < 0.5dB
- Plug & Play for fast installation

E. OM3 Cassette
F. OM4 Cassette
G. SM Cassette



H. 40G/100G Cassette

- I. 4-Port Cat.6A Keystone Jack Panels
- Full shielded by zinc alloy housing
- C6A component performance
- Fits 23-26 awg solid and stranded cable
- Fits cable O.D. 5-8mm
- J. Blank Panel



K. Cable Routing Spool

L. Cable Gland

Option:

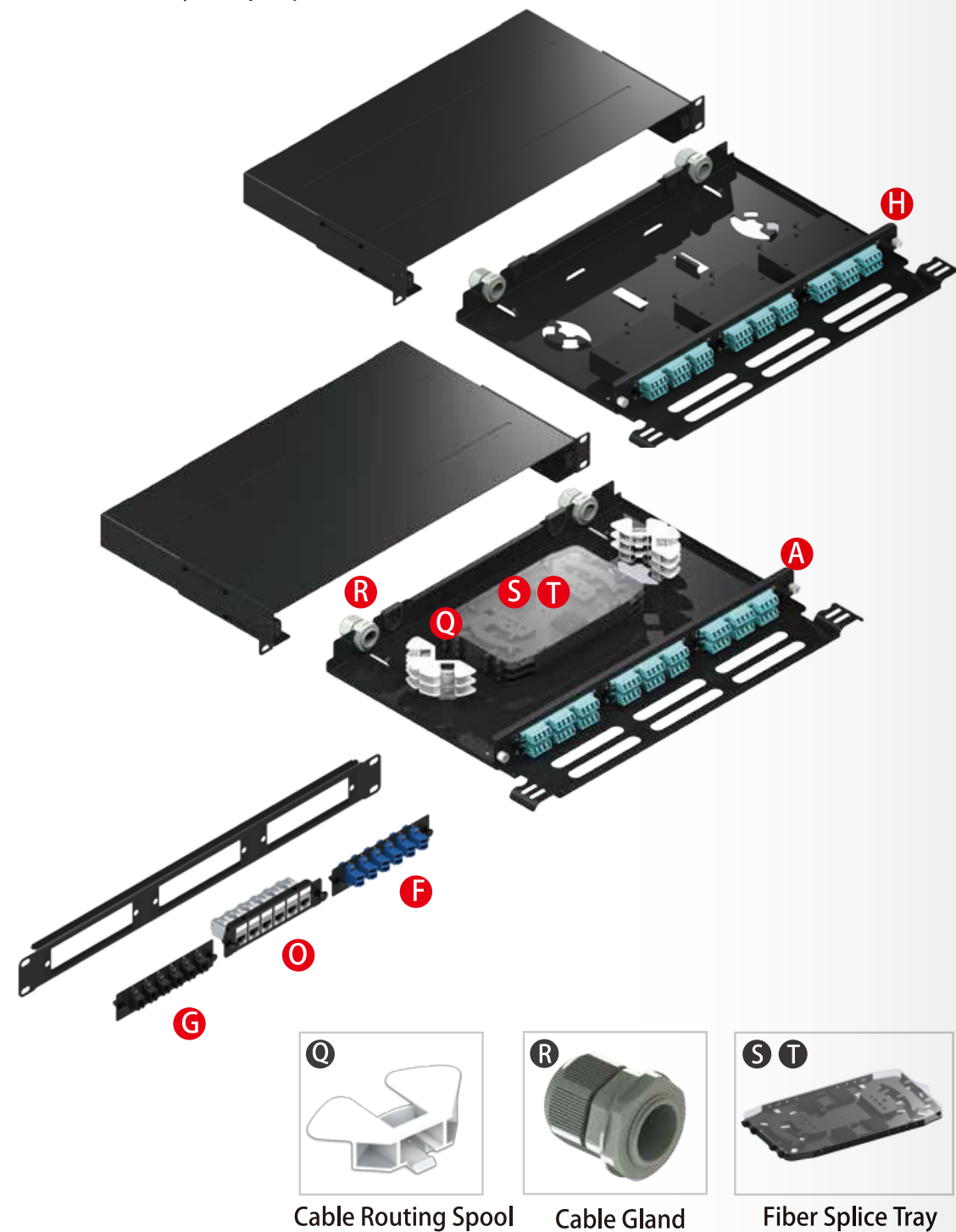
- M20 Cable O.D. 10mm-14mm
- M25 Cable O.D. 13mm-18mm

M. 12-Fiber Splice Tray

N. 24-Fiber Splice Tray

Multi-Function LGX Fiber Patch Panel

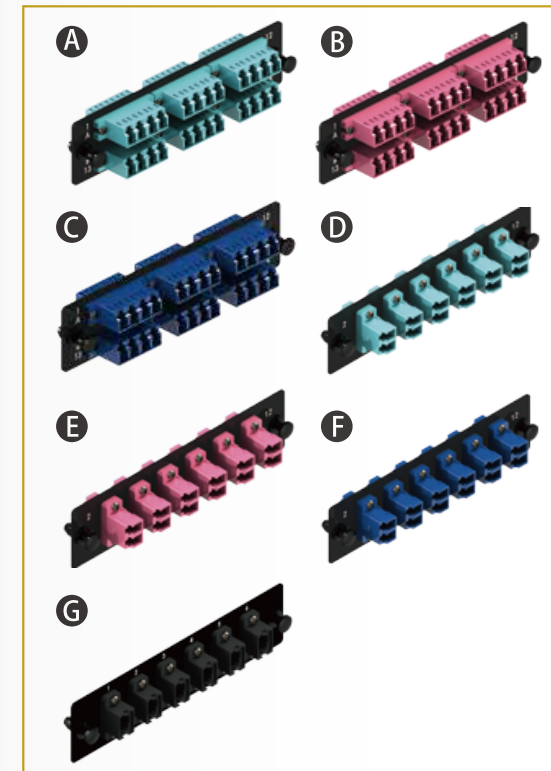
Multi-Function LGX fiber patch panel is constructed by flexible design to achieve diversified applications, like in-field fiber termination, pre-termination fiber cassette and RJ45 keystone termination. The panel accepts LGX cutout fiber adaptor plate, fiber cassette and even LGX 6 RJ45 keystone jack plate.



Cable Routing Spool

Cable Gland

Fiber Splice Tray



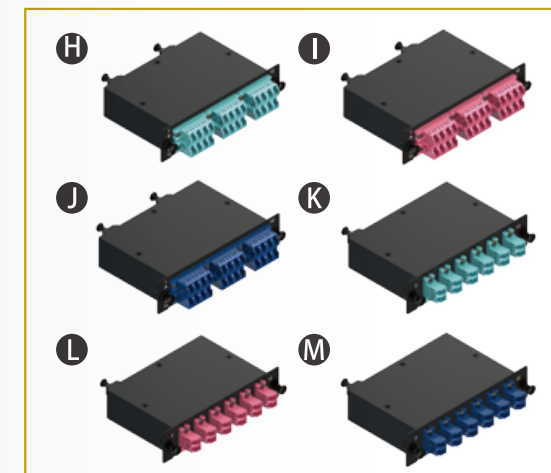
24C LC Adaptor Panels

- 6 Quad LC adaptors
- Plug & Play for fast installation
- Ceramic sleeve for OM3, OM4 and SM
- Insertion loss < 0.2dB

A. OM3 Aqua adaptor
B. OM4 Violet adaptor
C. SM Blue adaptor

12C LC Adaptor Panels

D. OM3 Aqua adaptor
E. OM4 Violet adaptor
F. SM Blue adaptor
G. MTP Adaptor



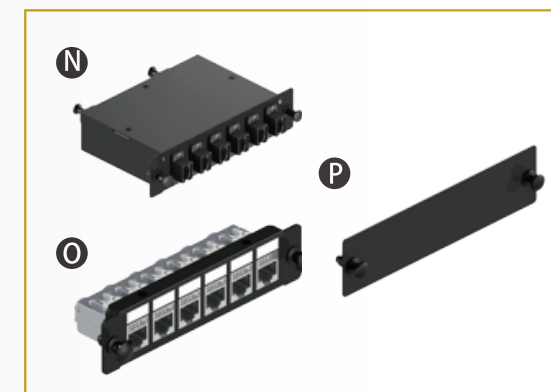
24C MTP-LC Cassettes

- 6 x Quad LC adaptors
- 2 x MTP adaptors
- 2 x 12F MTP-LC Harness
- 100% factory terminated and tested
- Low Insertion loss < 0.5dB
- Plug & Play for fast installation

H. OM3 Cassette
I. OM4 Cassette
J. SM Cassette

12C MTP-LC Cassettes

K. OM3 Cassette
L. OM4 Cassette
M. SM Cassette



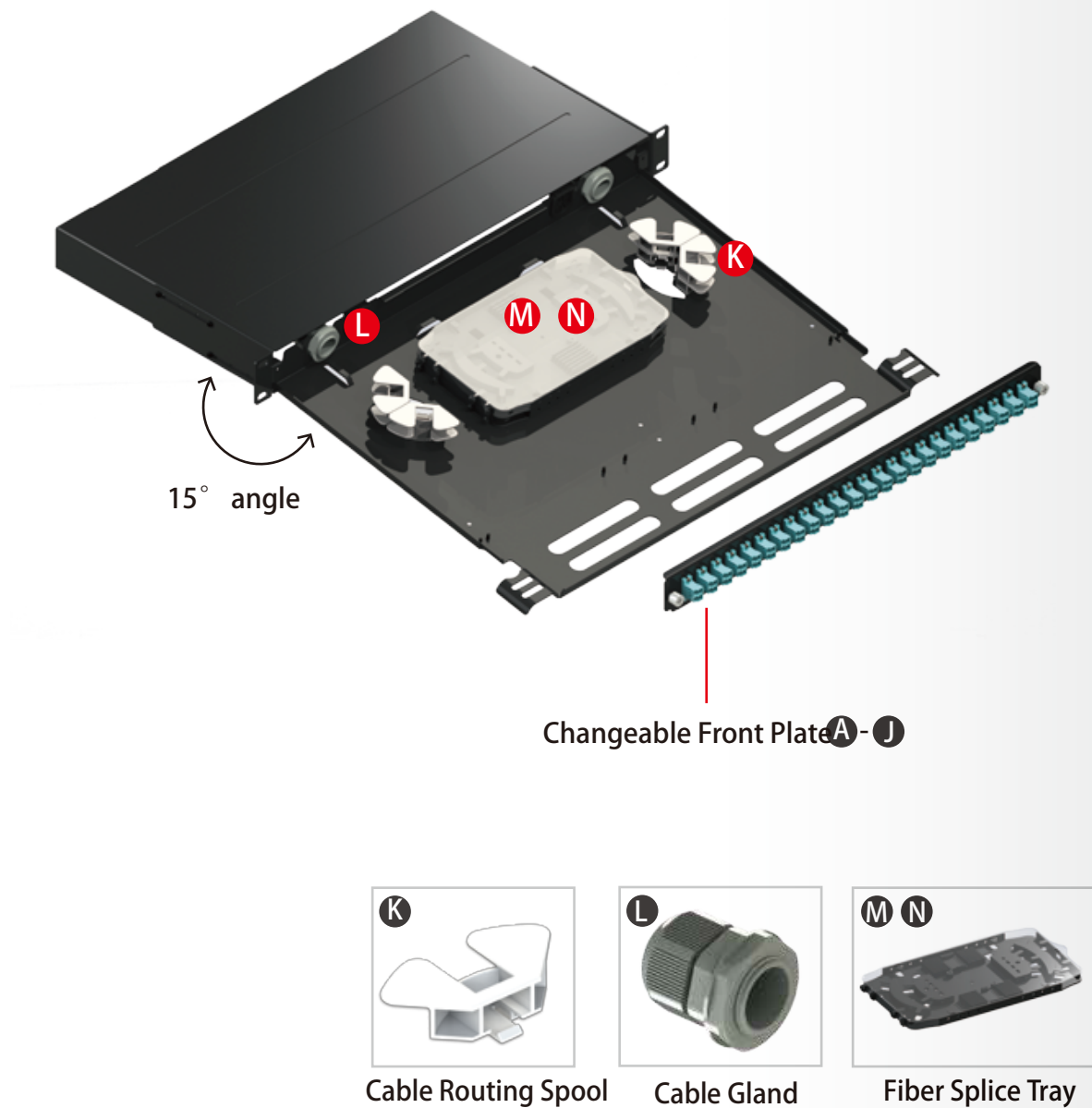
N. 40G / 100G Migration Cassette
O. 4-Port Cat.6A Keystone Jack Panels

- Full shielded by zinc alloy housing
- C6A component performance
- Fits 23-26 awg solid and stranded cable
- Fits cable O.D. 5-8mm

P. Blank Panel

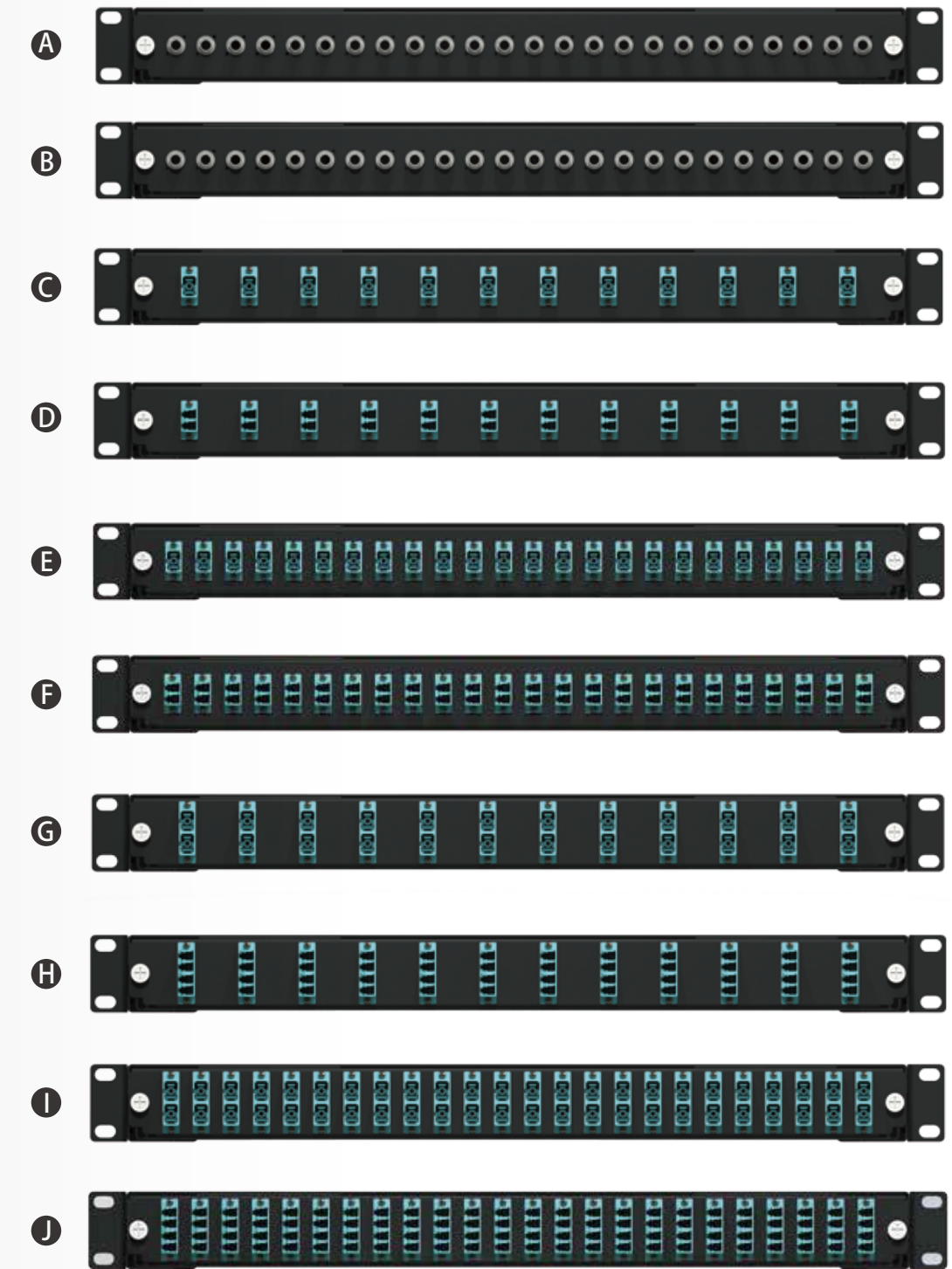
Fiber Patch Panel with Changeable Front Plate

1RU Multi-Function fiber patch panel is constructed by flexible design to achieve diversified applications, in-field fiber termination with various adaptor plates, like ST, FC, SC simplex, SC duplex, LC duplex, LC quad in 12port and 24port.



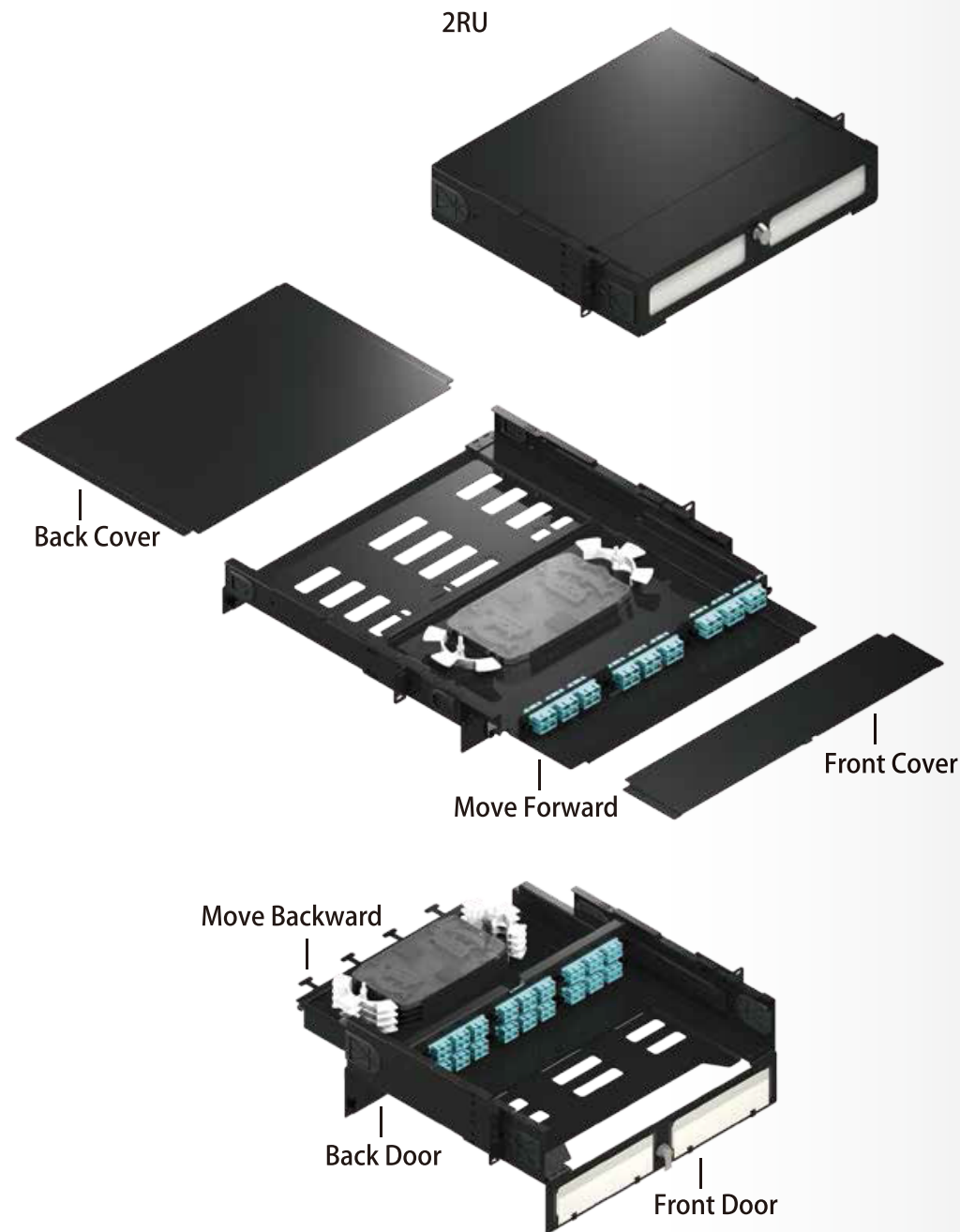
Front Plates

A FC 24pcs	C SC Simplex 12 pcs	E SC Simplex 24 pcs	G SC Duplex 12 pcs	I SC Duplex 24 pcs
B ST 24 pcs	D LC Duplex 12 pcs	F LC Duplex 24 pcs	H LC Quad 12 pcs	J LC Quad 24 pcs



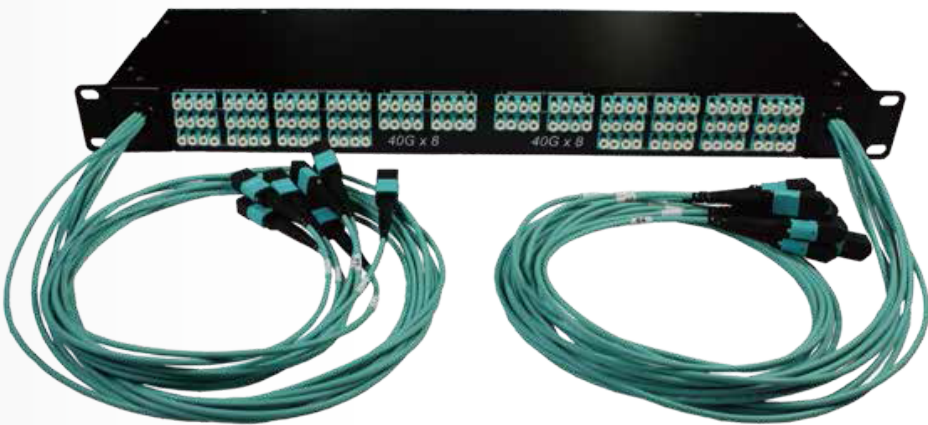
Bi-Direction Sliding Fiber Enclosure

Bi-Direction sliding fiber enclosure can be shut off with hinged front door and rear cover after termination, so it is away from dusts and prevents disconnection by careless touch, more secured and compact construction.



* Both of 1RU and 2RU are available.

MTP to LC Breakout System



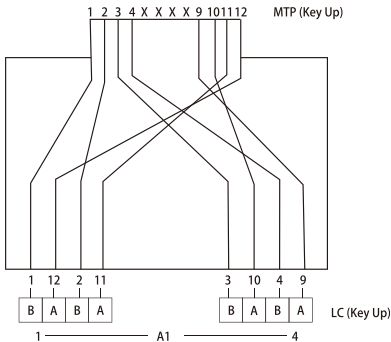
- Compact size design with 5" depth, weight 1.5kg
- Simple and easy installation with front patching design
- 16MTP to 64LC-Duplex and 12MTP to 48LC-Duplex offering greater choice
- Corning universal polarity or customized wiring assignment are accepted

Transmission Performance

		50um OM4 BIF	9um OS2 G.657A
MTP Mated Pair	Insertion Loss	≤0.35 dB	≤0.35 dB
	Return Loss	≥25 dB	≥60 dB
LC Mated Pair	Insertion Loss	≤0.15 dB	≤0.1 dB
	Return Loss	≥40 dB	≥55 dB

Wiring map

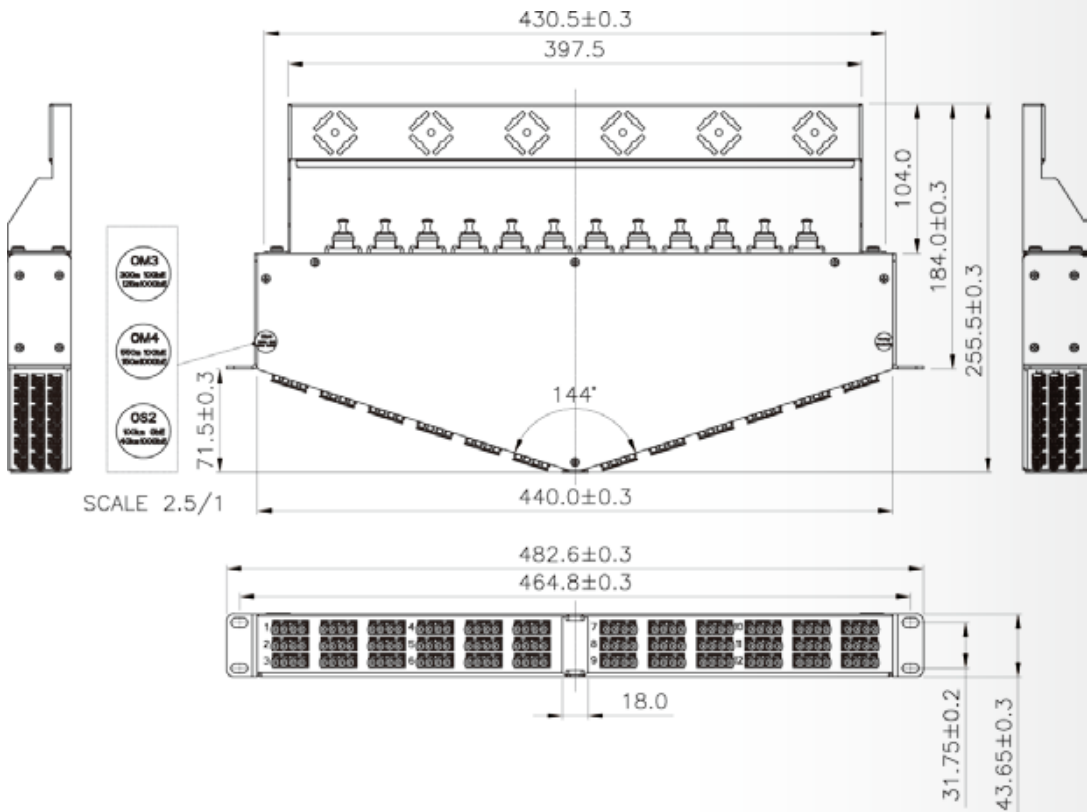
Fiber no.	Color	Fiber no.	Color
1.	Blue	7.	Red
2.	Orange	8.	Black
3.	Green	9.	Yellow
4.	Brown	10.	Violet
5.	Slate	11.	Rose
6.	White	12.	Aqua



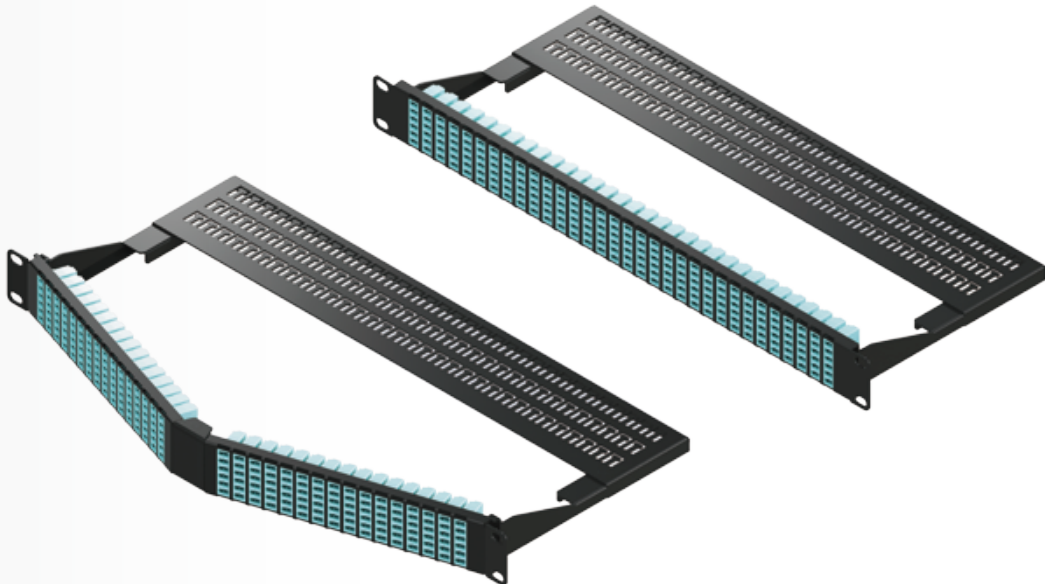
1RU 144 Ports MTP to LC Angled Patch Panel



- Compact size with light weight 1.5kg
- High density design fill into cabinets and racks
- Minimizes patch cord bend radius to the rack
- Divert cables to two separate directions, makes cable management more efficient

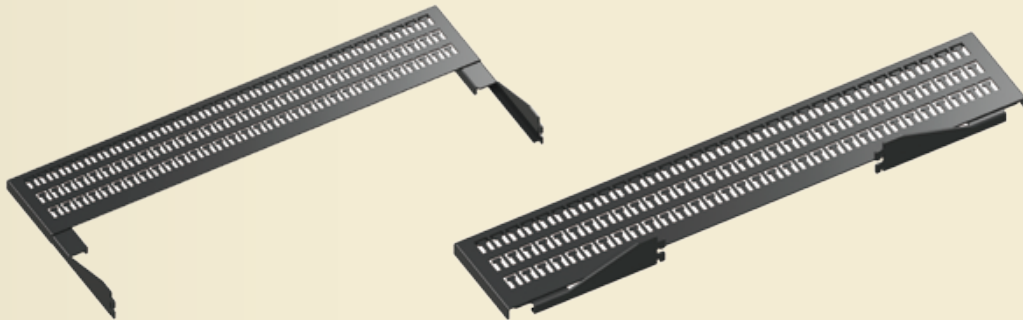


1RU 192 Ports LC Patch Panel

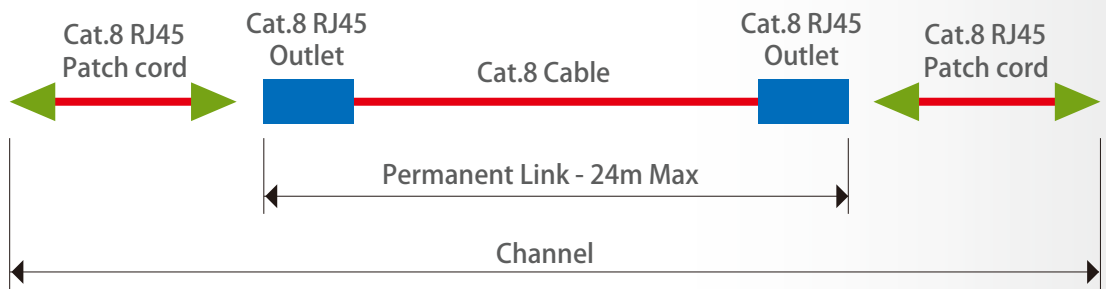


- High density design saves space and light weight
- Both of flat and angled front plates are available
- Neat and flush front plate with good looking
- Angled design minimizes patch cord bend radius to the rack
- Divert cables to two separate directions, makes cable management more efficient
- Removable and foldable cable management bar saves transportation cost and stock space
- LC adaptor SM with ceramic sleeve IL < 0.2dB; MM with P.B. sleeve IL < 0.3dB
- LC adaptor color available in Blue, Beige, Aqua and Erika-violet

Foldable Cable Management



Category 8 Channel



AWG of cord	De-rating rate factor (%)	Length of Cord (m)	Total max. length of channel (m)
22 & 23	0	8	32
24	20	6	30
26	50	4	28

Plug for Cat.8 RJ45 Patch cord



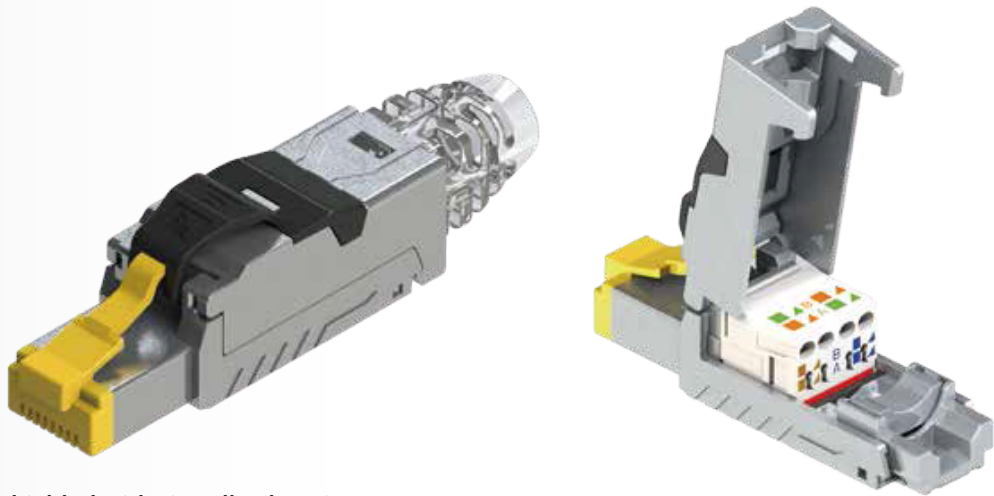
Cat.8 RJ45 Outlet



Cat.8 Cable



Full Shielded Field Termination Plug

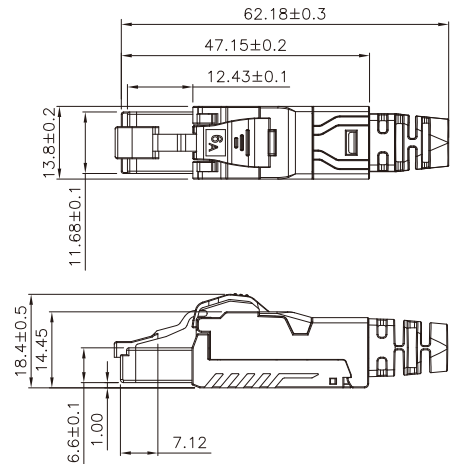
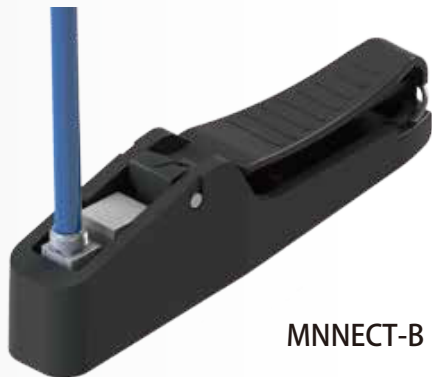


- Full shielded with zinc alloy housing
- T568A & B wiring
- L x W x H: 62.2 x 13.8 x 17.8mm
- GHMT C8 channel performance verified
- Complied with the C6A patch cord component
- Cable wire gauge: 22AWG to 26AWG
- Cable outer diameter: 6.0 to 8.5mm
- Suitable for the PoE plus (IEEE 802.3at) applications
- Easy, quickly, reliable and comfortable installation

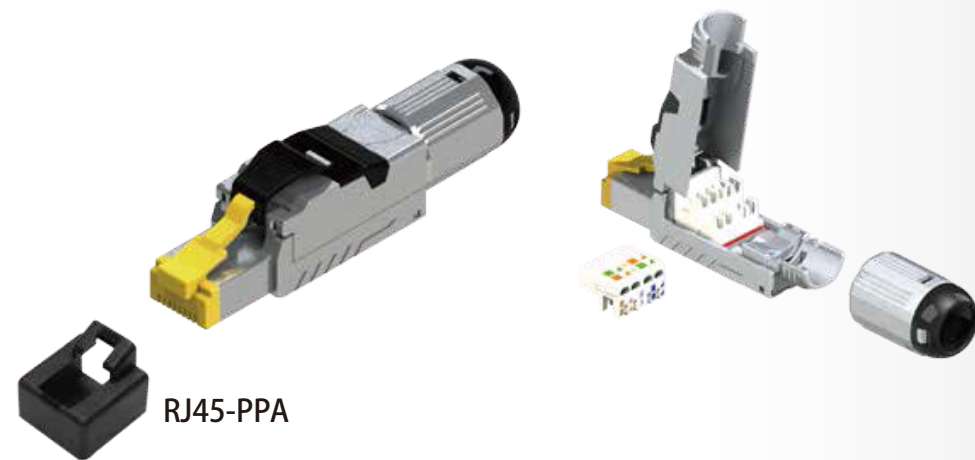


PART NO	DESCRIPTION
ECFFP-C6A	Cat.6A patch cord component level, full shielded, snap-in boot type
ECFFP-C8	Cat.8 channel level, full shielded, snap-in boot type

Suitable for easy crimping tool



IP20 Full Shielded Field Termination Plug, Screw-fit Boot

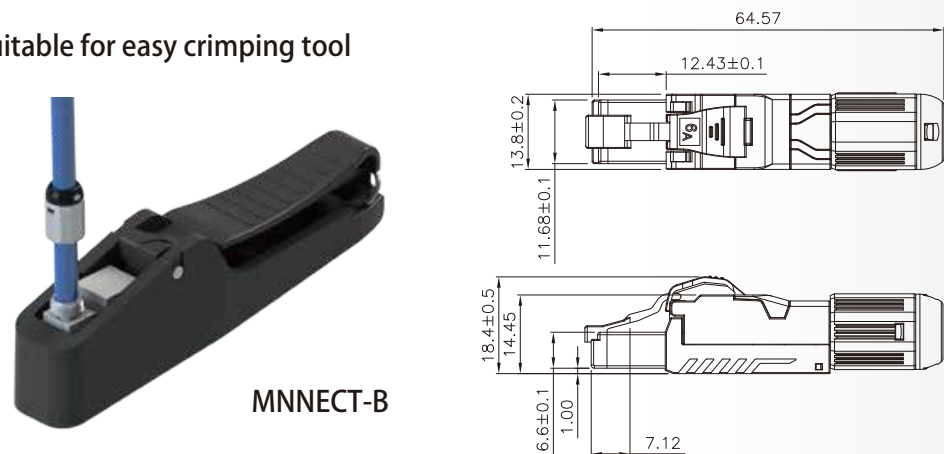


- Full shield with zinc alloy housing
- T568A & B wiring
- L x W x H: 64.6 x 14.4 x 18.4mm
- GHMT C8 channel performance verified
- Complied with the C6A patch cord component
- Cable wire gauge: 22AWG to 26AWG
- Cable outer diameter: 6.0 to 9.0mm
- IP20 protection by dust-cap(RJ45-PPA) and screw-fit boot design
- Suitable for the PoE plus (IEEE 802.3at) applications
- Easy, quickly, reliable and comfortable installation



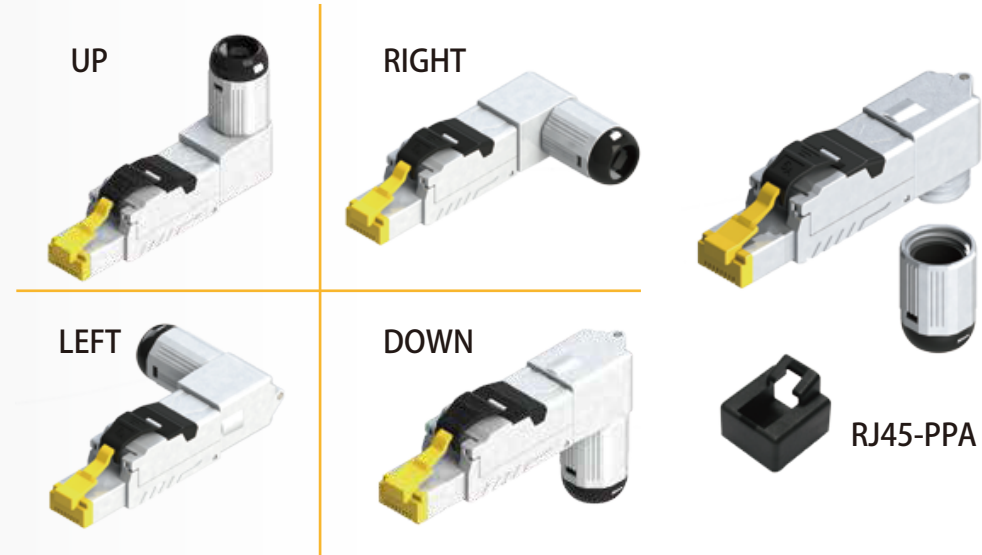
PART NO	DESCRIPTION
ECFFPS-C6A	Cat.6A patch cord component level, full shielded, screw-fit boot type
ECFFPS-C8	Cat.8 channel level, full shielded, screw-fit boot type

Suitable for easy crimping tool



MNNECT-B

IP20 Full Shielded 4-direction Field Termination Plug

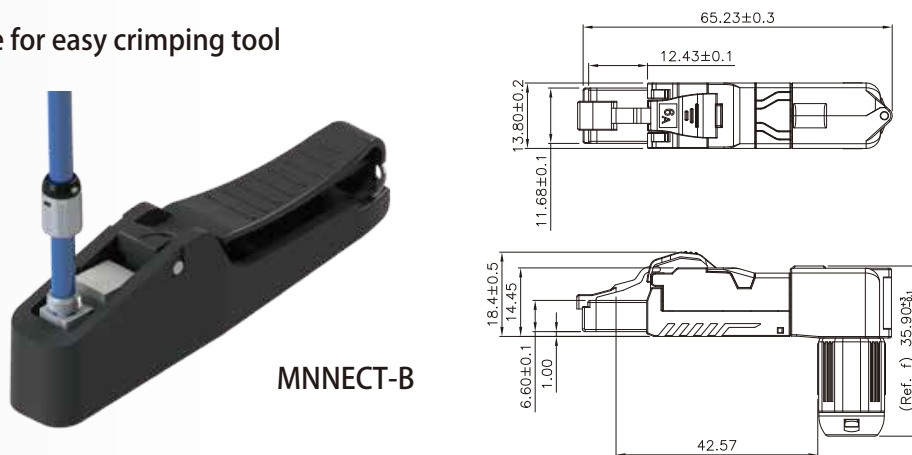


- Full shielded with zinc alloy housing
- 4 direction cable entry design
- T568A & B wiring
- GHMT C8 channel performance verified
- Complied with the C6A patch cord component
- Cable wire gauge: 22AWG to 26AWG
- Cable outer diameter: 6.0 to 9.0mm
- IP20 protection by dust-cap(RJ45-PPA) and screw-fit boot design
- Suitable for the PoE plus (IEEE 802.3at) applications
- Easy, quickly, reliable and comfortable installation



PART NO	DESCRIPTION
ECFFPA-C6A	Cat.6A patch cord component level, full shielded, 4 direction, screw-fit boot type
ECFFPA-C8	Cat.8 channel level, full shielded, 4 direction, screw-fit boot type

Suitable for easy crimping tool



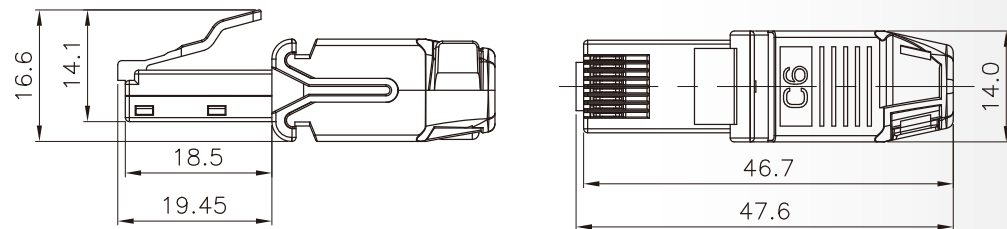
MNNECT-B

Unshielded Field Termination Plug



- Glassy black color, PC material
- T568A & B wiring
- L x W x H: 47.6 x 14.0 x 16.6mm
- Complied with the C6 / C6A patch cord component
- Cable wire gauge: 23AWG to 26AWG
- Cable outer diameter: 5.5 to 6.5mm
- Suitable for the PoE plus(IEEE802.3at) applications

PART NO	DESCRIPTION
ECUFP-C6	Cat.6 patch cord component level, unshielded
ECUFP-C6A	Cat.6A patch cord component level, unshielded



Rotatable Unshielded Field Termination Plug

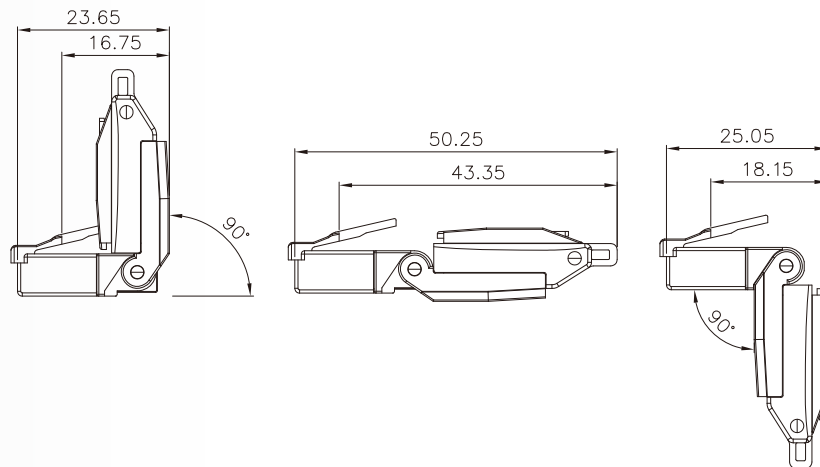
Upward rotation 90°

Downward rotation 90°

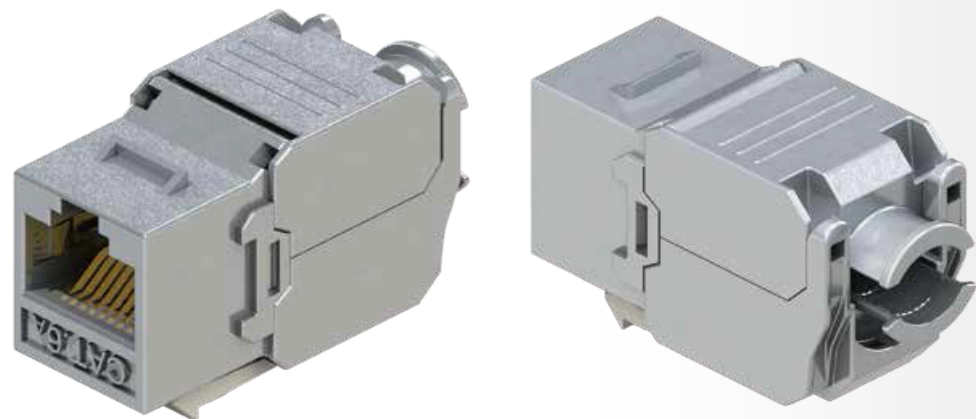


- Glassy black color, PC material
- T568A & B wiring
- Width: 14.0mm
- Complied with the C6 / C6A patch cord component
- Cable wire gauge: 23AWG to 26AWG
- Cable outerdiameter: 5.5 to 6.5mm
- Suitable for the PoE plus(IEEE802.3at) applications
- Save the space for usage

PART NO	DESCRIPTION
ECUFPR-C6	Cat.6 patch cord component level, rotatable, unshielded
ECUFPR-C6A	Cat.6A patch cord component level, rotatable, unshielded



180° Keystone Jack



- Full shielded by zinc alloy housing
- T568A & B wiring
- C6 & C6A component performance by ETL & DELTA verified
- UL safety listed
- Cable wire gauge: 23AWG to 26AWG
- Cable outer diameter: 5.0 to 8.0mm
- PoE plus IEC60512-99-001 verified by DELTA



PART NO	DESCRIPTION
KJ28F-C6-FS	Cat.6 component level, full shielded
KJ28F-6A-FS	Cat.6A component level, full shielded

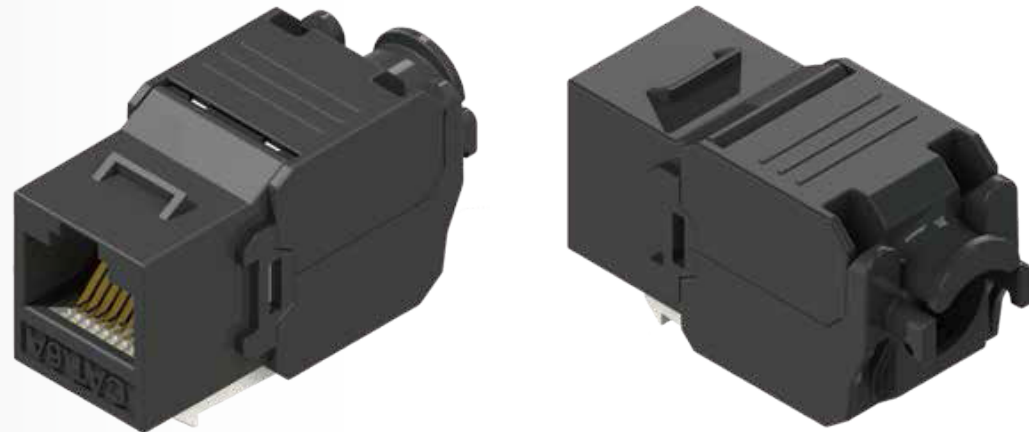
- L x W x H: 37.8 x 16.0 x 22.7
- Fits for 1U24port keystone panel

Suitable for easy crimping tool



MNNECT-A

180° Keystone Jack



- T568A & B wiring
- C6 & C6A component performance by ETL & DELTA verified
- UL safety listed
- Copper wire gauge: 23AWG to 26AWG
- Cable outer diameter: 5.0 to 8.0mm
- PoE plus IEC60512-99-001 verified by DELTA



PART NO	DESCRIPTION
KJ28F-C6-US	Cat.6 component level, unshielded
KJ28F-6A-US	Cat.6A component level, unshielded

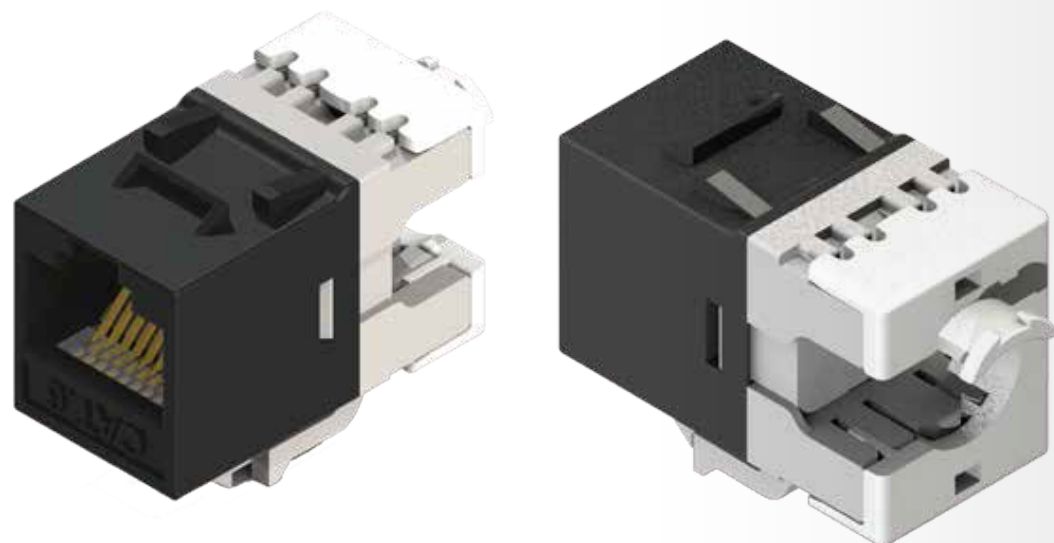
- L x W x H: 37.8 x 16.8 x 22.7
- Fits for 1U24port keystone panel

Suitable for easy crimping tool



MNNECT-A

180° Keystone Jack



- T568A & B wiring
- C6 & C6A component performance by ETL & DELTA verified
- UL safety listed
- Copper wire gauge: 23AWG to 26AWG
- Cable outer diameter: 5.0 to 8.0mm
- PoE plus IEC60512-99-001 verified by DELTA



PART NO	DESCRIPTION
KJ28-C6-US	Cat.6 component level, unshielded

- L x W x H: 31.6 x 14.5 x 21.8
- Fits for 1U24port, 1U48port and 0.5U24port keystone panel

DELTA PoE plus and C6A Component Certificate



Compliance Statement

No. 2017-051A

Connecting Hardware, Category 6A

Company
EPCT Corporation
NO. 219, Sec. 3, Dadu Rd.,
Beitou District,
Taipei City 112,
Taiwan (R.O.C.)

Product description
Screened Category 6A RJ45 Wall Outlets characterised up to 500 MHz, 100 Ω

Product identification
KJ28F-C6A-FS

Generic cabling and cabling components standards - Category 6A connector requirements

- ISO/IEC 11801:2011 (Ed. 2.2)
- IEC 60603-7-51:2010
- EN 50173-1:2011
- EN 50173-2:2007 including amendment A1:2010
- ANSI/TIA-568-C.2:2009

Technical report
DELTA-117-22160-01, DANAK-19/17329

EC Cabling product ID
6146

CS valid until
18 January 2018

This product has been tested by DELTA EC Cabling Group and complies with the electrical requirements of the above specified standards and "Terms and conditions for the EC VERIFIED programme for Generic and Coaxial Cabling", DQP231006. The testing included measurement of NEXT with a compliant test plug and calculation of all the 14 test cases in both measurement directions. The product takes part in a maintenance of certification schedule, which implies that DELTA EC Cabling performs a quality audit of the manufacturer's production and QA sites. The maintenance testing of the product is performed on a sample basis once a year. This compliance statement has been revised.

Hørsholm, 18 January 2017



Lars Lindskov Pedersen
Test Manager



Dennis Andersen
Head of Department

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2970 Hørsholm
Denmark

Tel. +45 72 19 40 00
Fax +45 72 19 40 01
www.madebydelta.com/cable



90° Keystone Jack

- Full shielded by zinc alloy housing
- T568A & B wiring
- C6 & C6A component performance by ETL verified
- UL safety listed
- The range for copper wire AWG: 23AWG to 26AWG
- The range for cable outer diameter: 5.0 to 8.0mm
- Assembled by full automation line
- Fits 1U24port, 1U48port and 0.5U24port keystone panel



Unshielded punch-down type

PART NO	DESCRIPTION
KJ32-C6-US	Cat.6 component level
KJ32-6A-US	Cat.6A component level

- L x W x H: 34.0 x 18.0 x 22.0mm
- Not for easy crimping tool



Full shielded punch-down type

PART NO	DESCRIPTION
KJ32-C6-FS	Cat.6 component level
KJ32-6A-FS	Cat.6A component level

- L x W x H: 37.0 x 18.0 x 22.0mm
- Not for easy crimping tool



Tool-less type

PART NO	DESCRIPTION
KJ32F-C6-US	Cat.6 component level, US type
KJ32F-6A-US	Cat.6A component level, US type
KJ32F-C6-FS	Cat.6 component level, FS type
KJ32F-6A-FS	Cat.6A component level, FS type

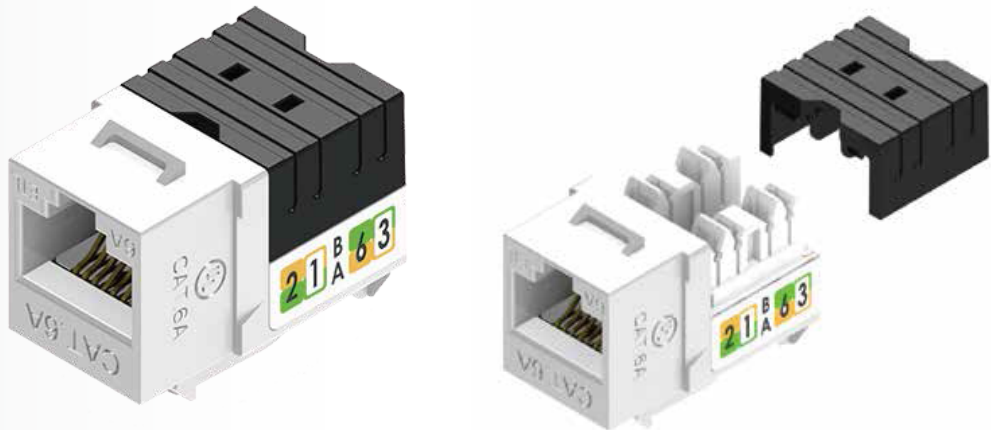
- L x W x H: 37.0 x 18.0 x 22.0mm
- Suitable for easy crimping tool

Suitable for easy crimping tool



MNNECT-B

Slim Type 90° Keystone Jack



- T568A & B wiring
- L x W x H: 27.9 x 16.5 x 21.5mm
- Complied with the C6A component level requirement
- UL safety listed
- Cable wire gauge: 23AWG to 26AWG
- Cable outer diameter: 5.0 to 8.0mm
- Assembled by full automation line
- Fits for 1U24port, 1U48port and 0.5U24port keystone jack panel
- Fits for Decora wall plate

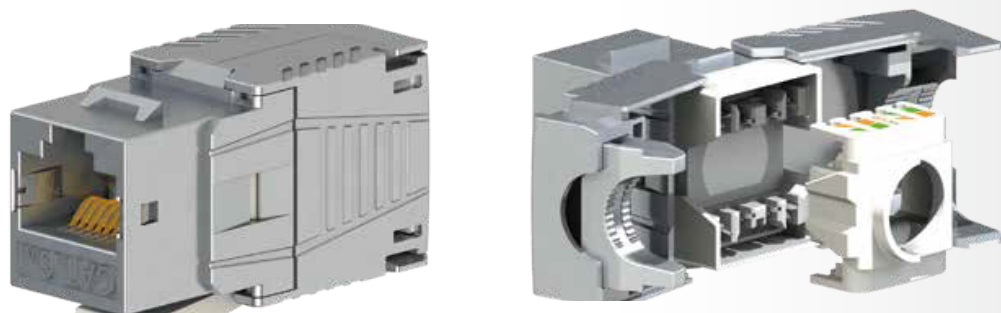


PART NO	DESCRIPTION
KJ38-C6-US	Slim type Cat.6 component level, unshielded, punch-down type
KJ38-6A-US	Slim type Cat.6A component level, unshielded, punch-down type

Full automation line



Full Shielded Keystone Jack



- Full shielded with zinc alloy housing
- T568A & B wiring
- L x W x H: 37.4 x 16.5 x 22.5mm
- GHMT C8 channel performance verified
- Complied with the C6A component level
- Cable wire gauge: 22AWG to 26AWG
- Cable outer diameter: 6.0 to 9.0mm
- Suitable for the PoE plus (IEEE 802.3at) applications
- Reliable and stable quality by insert-molding and press-fit assembly process
- Fits for 1U24port and 1U48port keystone panel



PART NO	DESCRIPTION
KJ58-6A-FS	Cat.6A component level performance, full shielded
KJ58-C8-FS	Cat.8 channel level performance, full shielded



MNNECT-C

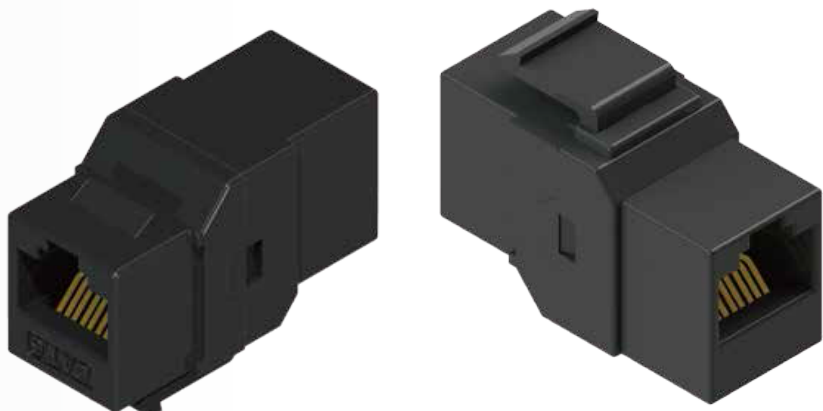
In-line Coupler Keystone Jack Type

- C6A channel performance by ETL verified
- UL safety listed
- Fits for 1U24port keystone jack panel



PART NO	DESCRIPTION
EC8402BS-C6	In-line coupler keystone type, C6 full shielded
EC8402BS-6A	In-line coupler keystone type, C6A full shielded

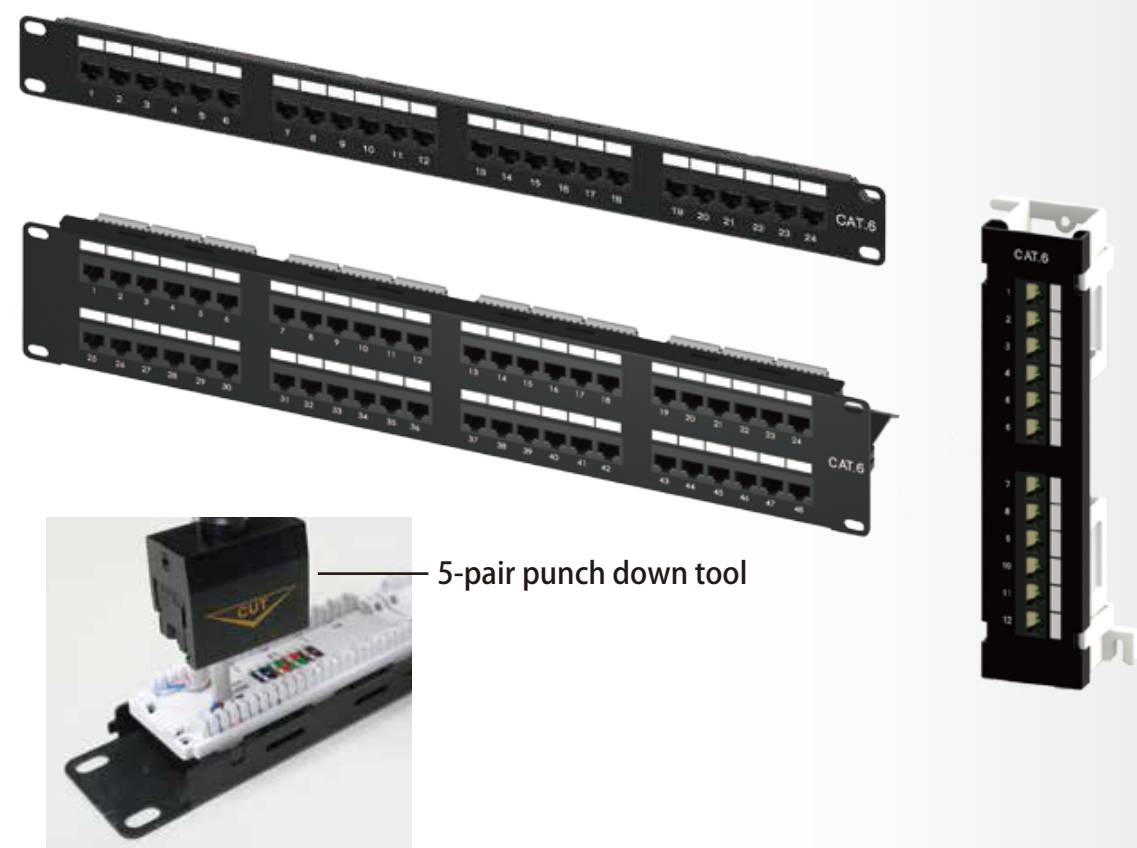
- L x W x H: 35.2 x 17.1 x 24.5mm



PART NO	DESCRIPTION
EC8402B-C6	In-line coupler keystone type, C6 unshielded

- L x W x H: 35.0 x 16.3 x 24.7mm

Unshielded PCB Module Patch Panel



- High headroom on C6 permanent link performance
- UL safety listed
- Copper wire gauge: 23AWG to 26AWG
- Standard 110 IDC works with 5-pair punch down tool



PART NO	DESCRIPTION
ECNPN24T-C6	19 inch C6 24port Patch panel, PCB module type, Unshielded
ECNPN48T-C6	19 inch C6 48port Patch panel, PCB module type, Unshielded
ECNPNMV12T-C6	Mini vertical C6 12port Patch panel, PCB module type, Unshielded

High Density Snap-in Keystone Panel



PART NO	DESCRIPTION
A	
ECHPPKJ48	19 inch 1U48port keystone panel, unshielded type
ECHPPKJF48	19 inch 1U48port keystone panel, shielded type
Recommended keystone jack type: KJ32, KJ32F, KJ28, KJ38, KJ58	
B	
ECPKJHU24	19 inch 0.5U24port keystone panel, unshielded type
ECPKJFHU24	19 inch 0.5U24port keystone panel, shielded type
Recommended keystone jack type: KJ28, KJ32, KJ32F, KJ38	
C	
ECPKJ24	19 inch 1U24port keystone panel, unshielded type
ECPKJF24	19 inch 1U24port keystone panel, shielded type
Recommended keystone jack type: KJ18, KJ18F, KJ28, KJ28F, KJ32, KJ32F, KJ36F, KJ38, KJ58	

Foldable Angled Keystone Panel



- Saving 60% room for stock, package and transportation
- Front panel is optional with solid steel or plastic panel

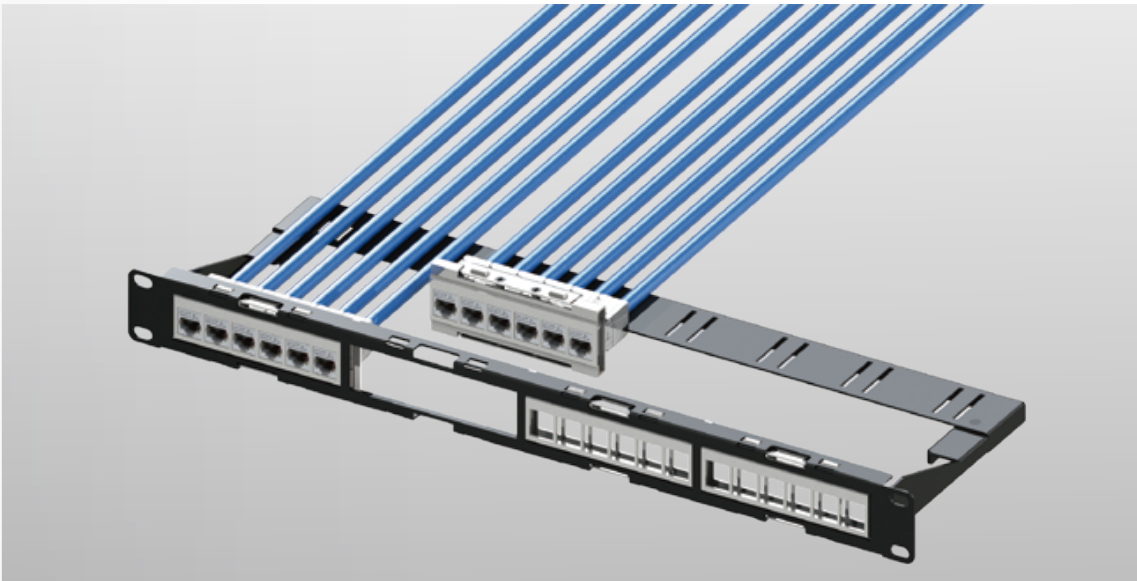
PART NO	DESCRIPTION
A	Inner box size L x W x H: 285 x 85 x 55mm
ECVKJ24	Foldable 1U24port keystone jack panel, unshielded type, solid steel front panel
ECVKJF24	Foldable 1U24port keystone jack panel, shielded type, solid steel front panel
*Recommended keystone jack type: KJ18, KJ18F, KJ28, KJ28F, KJ32, KJ32F, KJ36F, KJ38, KJ58	
B	Inner box size L x W x H: 285 x 85 x 110mm
ECVKJ48	Foldable 2U48port keystone jack panel, unshielded type, solid steel front panel
ECVKJF48	Foldable 2U48port keystone jack panel, shielded type, solid steel front panel
*Recommended keystone jack type: KJ18, KJ18F, KJ28, KJ28F, KJ32, KJ32F, KJ36F, KJ38, KJ58	
C	Inner box size L x W x H: 285 x 85 x 65mm
ECHVKJ48	Foldable 1U48port keystone jack panel, unshielded type, solid steel front panel
ECHVKJF48	Foldable 1U48port keystone jack panel, shielded type, solid steel front panel
*Recommended keystone jack type: KJ32, KJ32F, KJ28, KJ38, KJ58	

Cassette Patch Panel

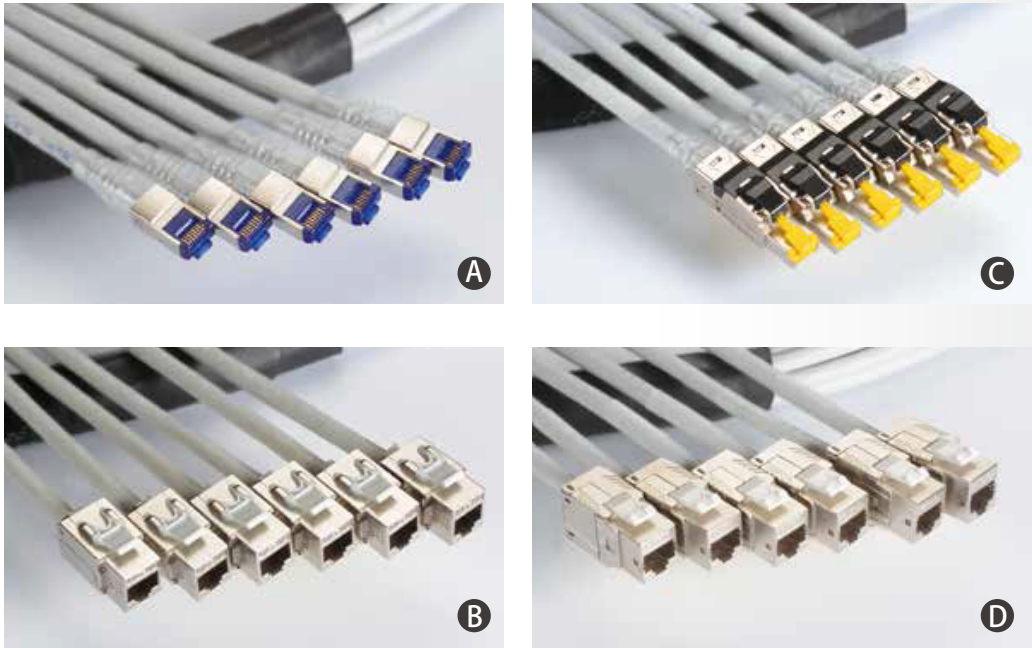


- 6port x 4, 24 port in 1unit
- Perfect grounding performance by spring contact design and nickel plated bracket
- Install bracket form the rear side of panel
- Black powder coating for panel and support-bar
- Foldable support bar design for saving packing size

PART NO	DESCRIPTION
ECCPKJF24	6X4 24port bracket panel, shielded type
ECCPKJ24	6X4 24port bracket panel, unshielded type



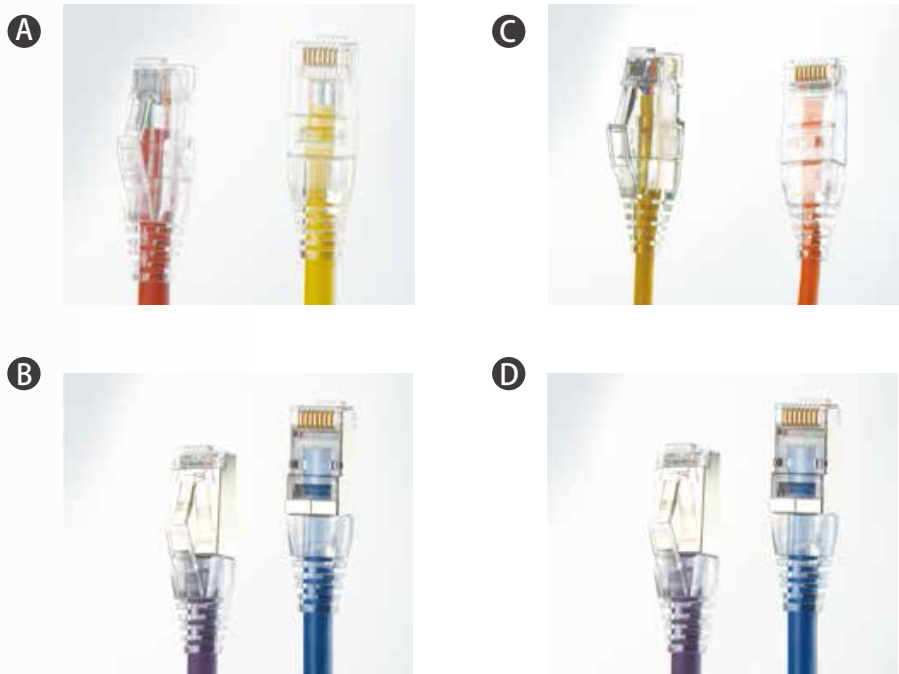
Copper Trunk Assembly



- Quality assurance by pre-terminated and 100% testing in factory.
- Private ID serial number is on each trunk cable
- 100% FLUKE tested each cord
- 100% CCD inspection on each crimped plug
- The dimension of plug meets the FCC part 68 and IEC60603-7 standard
- PVC(CM / CMR)and LSZH(IEC60332-1-2 / IEC 60332-3-24) jacket material available

DESCRIPTION
A
6ports Trunk assembly, C6A SFTP 23AWG solid wires cable, solid wire plug
B
6ports Trunk assembly, C6A SFTP 23AWG solid wires cable, KJ32
C
6ports Trunk assembly, C6A SFTP 23AWG solid wires cable, field termination plug
6ports Trunk assembly, C8 SFTP 22AWG solid wires cable, field termination plug
D
6ports Trunk assembly, C6A SFTP 23AWG solid wires cable, KJ58
6ports Trunk assembly, C8 SFTP 22AWG solid wires cable, KJ58
* Length available: 5M to 90M

Copper Patch Cord



- Complied with the C6 and C6A patch cord component performance requirement
- Bare copper material
- CM PVC or LSZH(IEC60332-1-2) / LSFRZH(IEC60332-3-24) jacket
- Min. 50micro-inch gold plating on plug surface contact area
- Clear boot

DESCRIPTION
A
C6 UTP patch cord, 24AWG, SR-V86 clear boot
B
C6 F/UTP patch cord, 26AWG, SR-V86 clear boot
C6 U/FTP patch cord, 26AWG, SR-V86 clear boot
C6 S/FTP patch cord, 26AWG, SR-V86 clear boot
C6A F/UTP patch cord, 26AWG, SR-V86 clear boot
C6A U/FTP patch cord, 26AWG, SR-V86 clear boot
C6A S/FTP patch cord, 26AWG, SR-V86 clear boot
*Length available: 0.5M to 20M
C
C6 UTP patch cord, 28AWG, SR-V90 clear boot
D
C6 U/FTP patch cord, 28AWG, SR-V86 clear boot
C6A U/FTP patch cord, 28AWG, SR-V86 clear boot
*Length available: 0.5M to 10M

Extractor and Owl-Eyed I.D. Patch Cord

- Complied with the C6 and C6A patch cord component performance requirement
- CM PVC or LSZH(IEC60332-1-2) / LSFRZH(IEC60332-3-24) jacket
- Min. 50micro-inch gold plating on plug surface contact area
- Clear boot



Extractor type
Seesaw tab design makes easy access and removal in high density patching environment

DESCRIPTION
C6 UTP patch cord, 24AWG, extractor boot
C6A S/FTP patch cord, 26AWG, extractor boot
· Length available: 0.5M to 20M



Owl-Eyed type
Easily identify the termination point to other
Make trouble shooting easier

DESCRIPTION
C6 UTP patch cord, 24AWG, owl-eye boot
C6A S/FTP patch cord, 26AWG, owl-eye boot
· Length available: 0.5M to 20M



DESCRIPTION
C6 UTP patch cord, 24AWG, extractor + owl-eye boot
C6A S/FTP patch cord, 26AWG, extractor + owl-eye boot
· Length available: 0.5M to 20M

Premium Copper Patch Cord

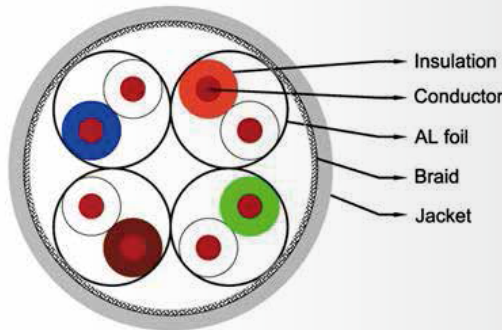
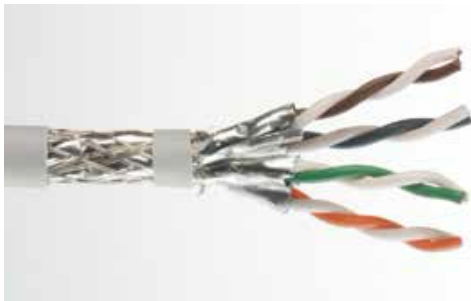


- Performance is compliant with both of COMPONENT level and CHANNEL level
- Private ID serial number is on each cord
- Fluke tested 100% each cord
- 100% CCD inspection on each crimped plug
- The recessed depth of crimped contact blade for each crimped plug meets FCC part 68 and IEC60603-7 standard
- Fluke tested report and CCD measured result are stored in CLOUD data center

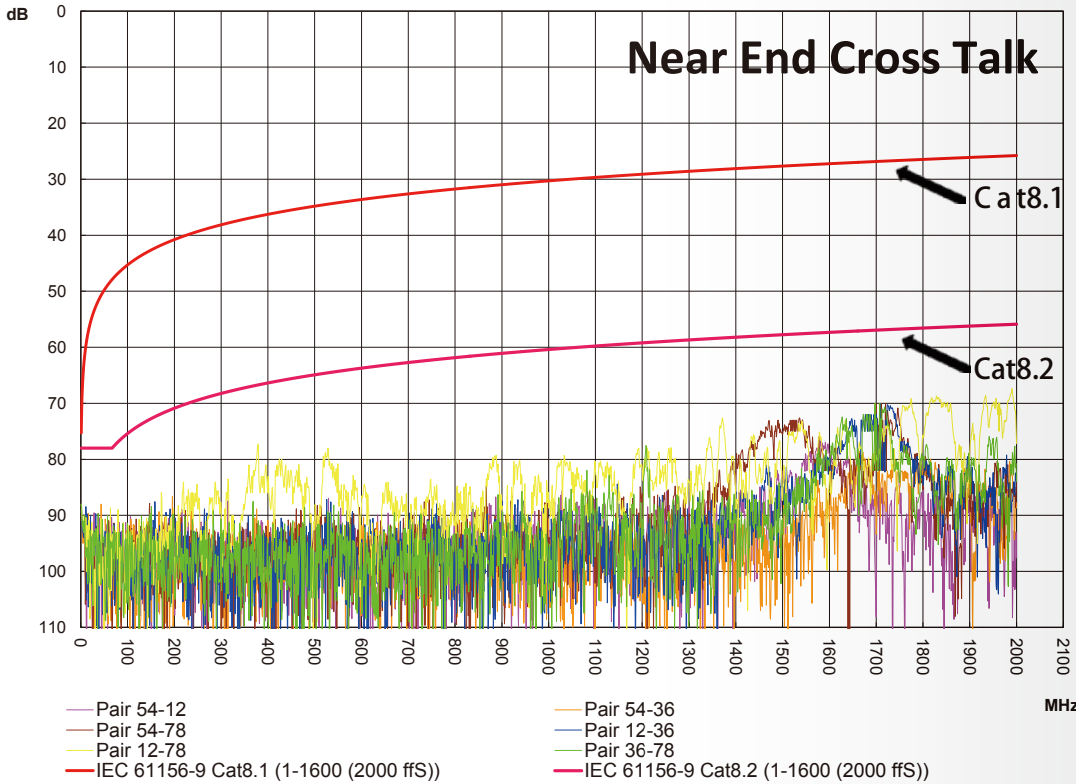
High Frequency Report by Fluke Equipment				
Cable ID: 20160128-00001A				
Date / Time: 01/08/2016 20:19:38 PM				
Headroom: 2.7 dB (NEXT 36-40)				
Test Limit: ISO Patch Cord Cat6A 1.0m				
Cable Type: Cat 7 S/FTP				
NVP: 79.9%				
Model: DTX-1800				
Main S/N: 9654163				
Remote S/N: 969098				
Main Adapter: DTX-PCA5M ISO/IEC				
Remote Adapter: DTX-PCA5M ISO/IEC				
Type	Status	Pair	Value	Margin
Wire Map	PASS			
Length (ft)	N/A	Pair 12	3	
Prop. Delay (ns)	N/A	Pair 36	5	
Delay Skew (ns)	N/A	Pair 36	1	
Resistance (ohms)	N/A	Pair 36	0.3	
NEXT (dB)	PASS	Pair 36-45	36.0	2.7
RL (dB)	PASS	Pair 36	15.4	3.4
Cable ID: 20160128-00001B				
Date / Time: 01/08/2016 08:19:07 PM				
Headroom: 3.2 dB (NEXT 36-79)				
Test Limit: ISO Patch Cord Cat6A 1.0m				
Cable Type: Cat 7 S/FTP				
NVP: 75.5%				
Model: DTX-1800				
Main S/N: 9654163				
Remote S/N: 969098				
Main Adapter: DTX-PCA5M ISO/IEC				
Remote Adapter: DTX-PCA5M ISO/IEC				
Type	Status	Pair	Value	Margin
Wire Map	PASS			
Length (ft)	N/A	Pair 12	3	
Prop. Delay (ns)	N/A	Pair 36	5	
Delay Skew (ns)	N/A	Pair 36	1	
Resistance (ohms)	N/A	Pair 36	0.2	
NEXT (dB)	PASS	Pair 36-78	34.2	3.2
RL (dB)	PASS	Pair 36	19.3	3.3
* Scanning the QR code to get the completed test report from the Cloud storage.				

Measurement Report for Crimped Plug Contacts								
• Standard : IEC 60603-7, FCC 68								
• Depth of Recessed Plug Contacts After Crimping is 0.450mm - 0.550mm								
D : 0.450 - 0.550mm								
Depth of Recessed Plug Contacts After Crimping								
PIN	PIN-1	PIN-2	PIN-3	PIN-4	PIN-5	PIN-6	PIN-7	PIN-8
A	0.525	0.532	0.544	0.543	0.535	0.529	0.535	0.528
B	0.535	0.53	0.54	0.541	0.537	0.528	0.539	0.522
* The label end is A, the other is B Unit: mm								
Cable ID : 20151203-00001								
Date : 2015/12/03 (YYYY/MM/DD)								

Category 8 Cable



- GHMT C8 channel performance verified
- Complied with the C8 cable requirement
- 22AWG solid copper wire, Skin-Foam-Skin Polyethylene isolation
- Aluminum foil around each pair, Tin plated copper braid for overall screen
- LSZH/LSFRZH or CM/CMR PVC jacket, OD 7.6mm
- Suitable for the PoE plus (IEEE 802.3at) applications
- 305meters or 500meters in wooden reel



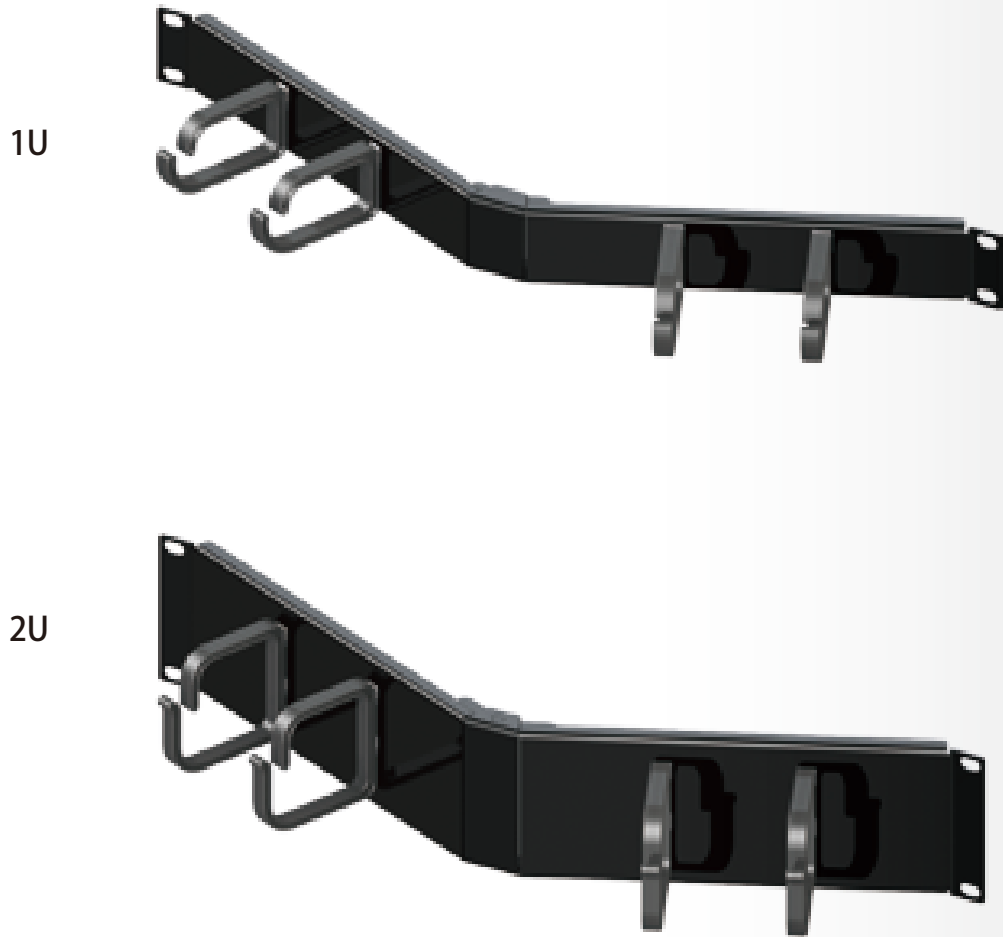
Easy Crimping Tool



- Light weight by plastic material design
- Economic solution for keystone jack and field termination plug installation

PART NO	DESCRIPTION
MNNECT-A	For KJ18F, KJ28F and KJ36F
MNNECT-B	For KJ32F and FP series Plug
MNNECT-C	For NKJ28 and KJ58

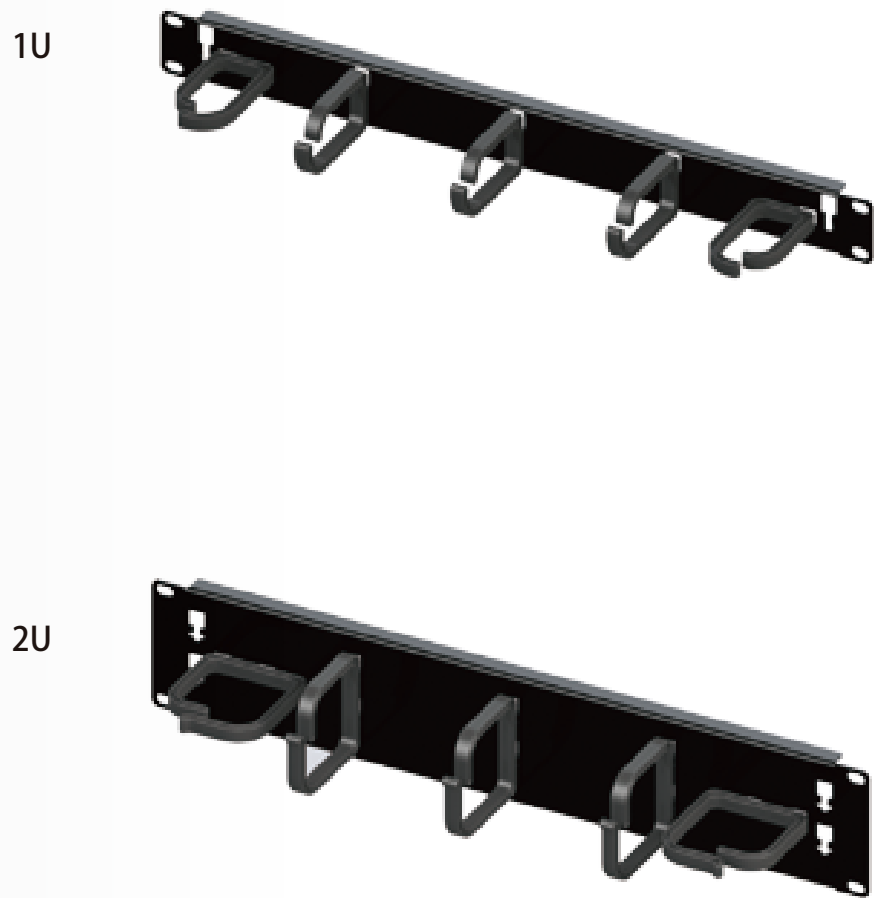
Hinged Angled Cable Management



PART NO	DESCRIPTION
EC8101V/1	Foldable cable management, 1U
Inner box size L x W x H: 285 x 85 x 55mm 2pcs/box	
EC8101V/2	Foldable cable management, 2U
Inner box size L x W x H: 285 x 85 x 110mm 2pcs/box	



Flat Cable Management



PART NO	DESCRIPTION
EC8101A/1	Flat cable management, 1U
Inner box size L x W x H: 560 x 100 x 75mm 5pcs/box	
EC8101A/2	Flat cable management, 2U
Inner box size L x W x H: 560 x 100 x 75mm 5pcs/box	

