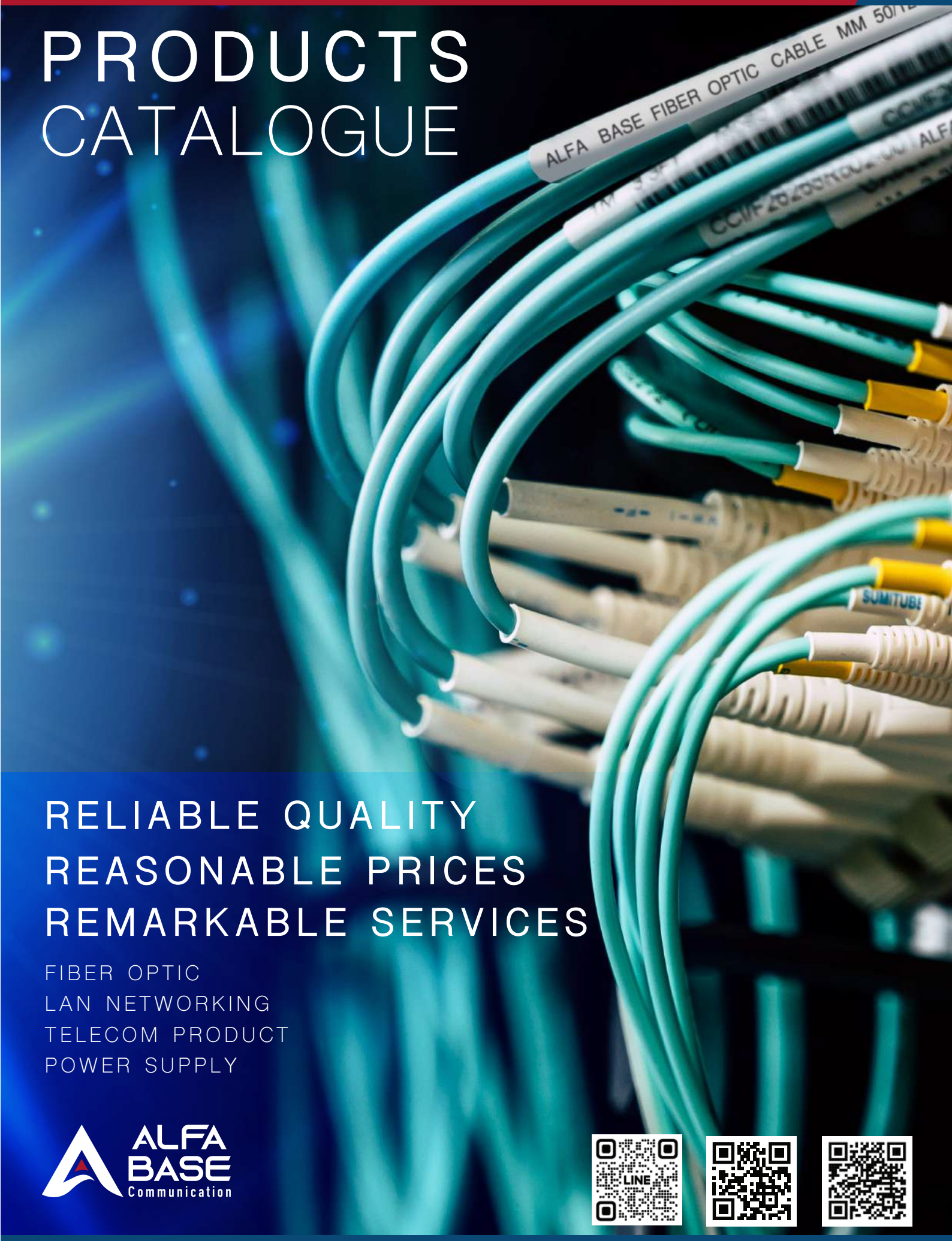
PRODUCTS CATALOGUE



RELIABLE QUALITY
REASONABLE PRICES
REMARKABLE SERVICES

FIBER OPTIC
LAN NETWORKING
TELECOM PRODUCT
POWER SUPPLY

ALFA BASE Communication

Line Official
@alfabase

Official Website
www.alfabase.co.th

Facebook
Alfabasecommunication

NOTES

INTRO

เรียน ท่านผู้มีอุปการคุณทุกท่าน

บริษัท อัลฟา เบส มาร์เก็ตติ้ง จำกัด ซึ่งเป็นผู้แทนจำหน่าย และบริการสินค้ากลุ่มอุปกรณ์ที่ใช้ในการติดตั้งเชื่อมโยงโครงข่ายสื่อสารโทรคมนาคม ดาต้าคอม เน็ทเวิร์ค เช่น ไฟเบอร์ออฟติก LAN Networking เพาเวอร์ซัพพลาย มานานกว่า 20 ปี บริษัทฯ มีความยินดีขอเสนอ Products Catalogue ซึ่งได้รวบรวมสินค้าที่ทางบริษัทฯ ได้จัดจำหน่าย โดยจัดแบ่งออกเป็น 4 กลุ่มใหญ่ ๆ เพื่อให้ง่ายต่อการค้นหา

ประกอบด้วย

1. Fiber Optic
2. LAN Networking
3. Telecom Product
4. Power Supply

ทางบริษัทฯ ยินดีที่จะให้บริการสินค้าดังกล่าวในคุณภาพที่ดี ราคายุติธรรม และสะดวกรวดเร็ว หากท่านมีข้อสงสัยในตัวสินค้าที่เราจำหน่ายในประเภทใด หรือต้องการข้อมูลสินค้าต่าง ๆ เพิ่มเติม สามารถสอบถามได้ที่

0 2346-9100

E-mail info@alfabase.co.th, sales@alfabase.co.th

@alfabase

www.alfabase.co.th

Alfabasecommunication

ด้วยความเคารพอย่างสูง

บริษัท อัลฟา เบส มาร์เก็ตติ้ง จำกัด

บริษัท ฯ อาจมีการเปลี่ยแปลงข้อมูลในอนาคต

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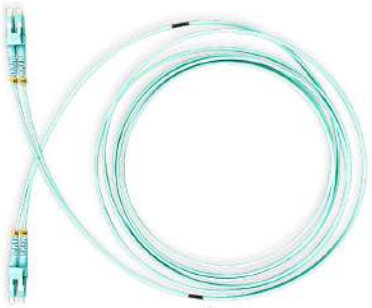
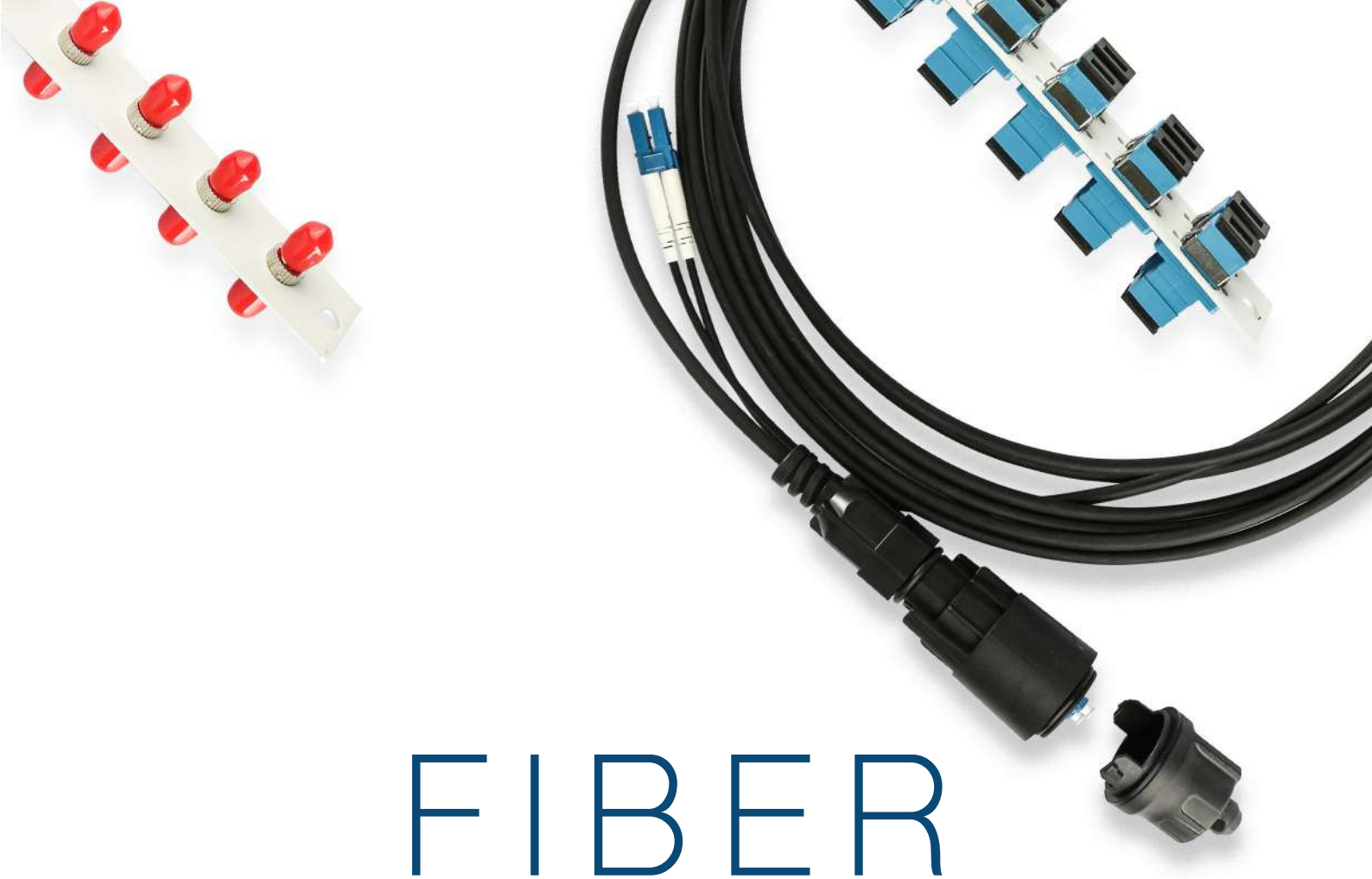






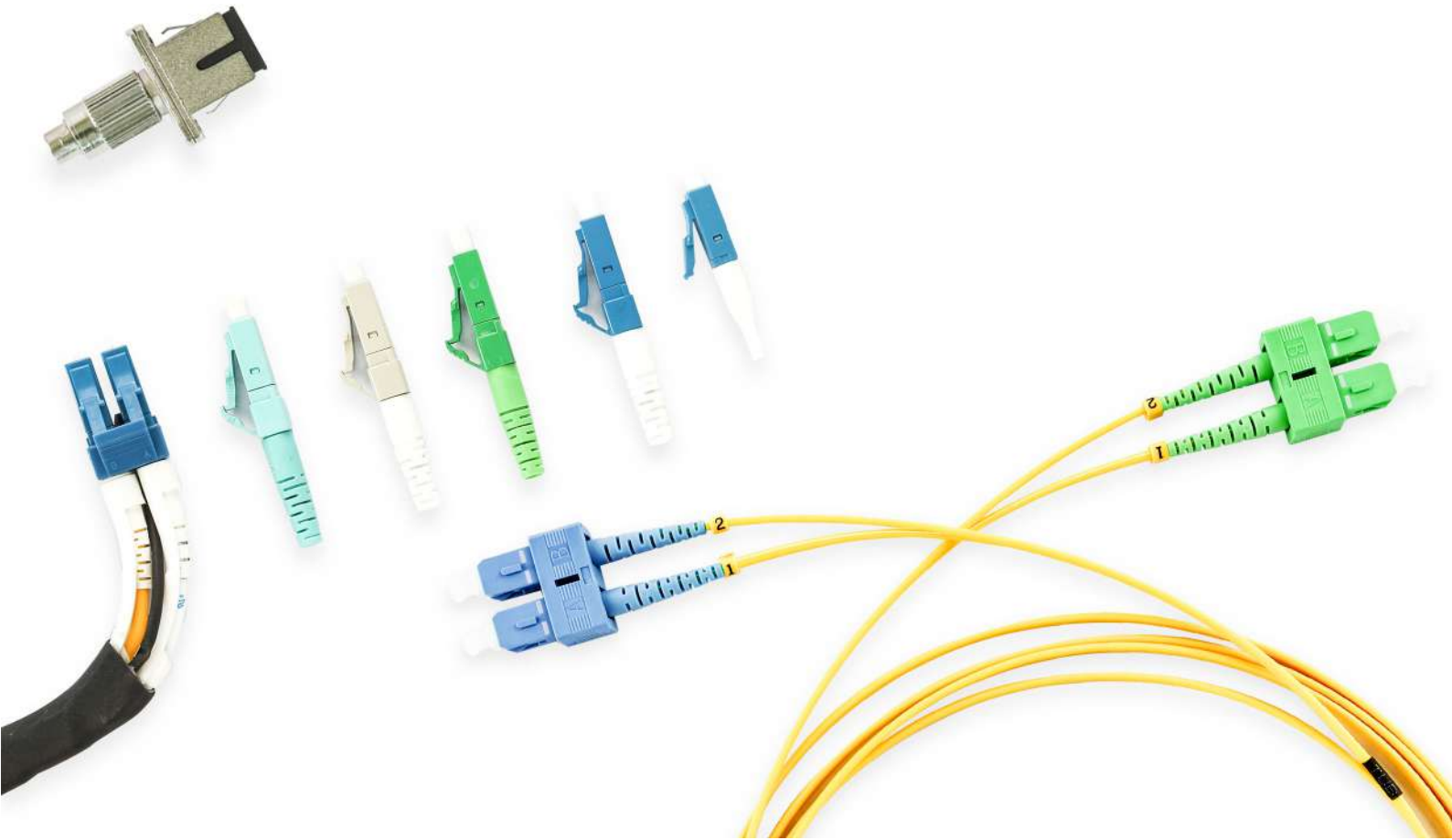






FIBER OPTIC

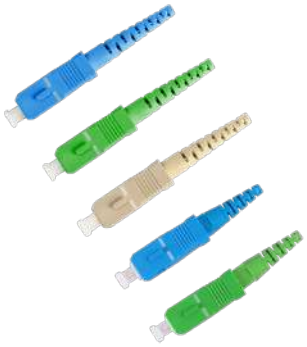
อุปกรณ์ไฟเบอร์ออฟติก



FIBER OPTIC
CONNECTOR



FC Connector



SC Connector



ST Connector



LC Connector



Field Installable Connector



MPO/MTP Connector

Features :

- Low insertion loss and back reflection
- Zirconia ceramic ferrule with UPC/APC polishing grade
- Available in standard colors with several type of boots

General Specifications :

Insertion Loss (dB)	0.20 typical (UPC), 0.30 typical (APC) for SM 0.30 typical for MM
Return Loss (dB)	>50 (UPC) >60 (APC)
Operating Temperature (°C)	-40 to +75
Range Durability (dB)	<0.2 change after 500 matings

FIBER OPTIC

CONNECTOR

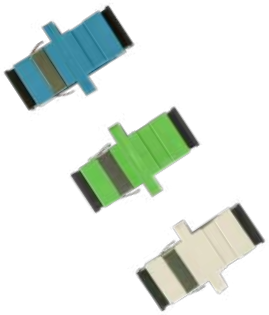
PART NO.	DESCRIPTIONS	PRICE
	FC Connector	
CON1US1-0	FC Connector SM Simplex Ceramic Ferrule	40.-
CON1UM1-0	FC Connector MM Simplex Ceramic Ferrule	40.-
CON1AS1-0	FC/APC Connector SM Simplex Ceramic Ferrule	45.-
	SC Connector	
CON2US1-0	SC Connector SM Simplex Ceramic Ferrule	40.-
CON2UM1-0	SC Connector MM Simplex Ceramic Ferrule	40.-
CON2AS1-0	SC/APC Connector SM Simplex Ceramic Ferrule	45.-
	ST Connector	
CON3US1-0	ST Connector SM Simplex Ceramic Ferrule	40.-
CON3UM1-0	ST Connector MM Simplex Ceramic Ferrule	40.-
	LC Connector	
CON4US1-0	LC Connector SM Simplex Ceramic Ferrule	40.-
CON4UM1-0	LC Connector MM Simplex Ceramic Ferrule	40.-
CON4AS1-0	LC/APC Connector SM Simplex Ceramic Ferrule	45.-
	E2000 Connector	
CON5US1-0	E2000 Connector SM Simplex Ceramic Ferrule	Call
CON5UM1-0	E2000 Connector MM Simplex Ceramic Ferrule	Call
CON5AS1-0	E2000/APC Connector SM Simplex Ceramic Ferrule	Call
	MTRJ Connector	
CON6US2-0	MTRJ Connector SM Duplex Ceramic Ferrule	Call
CON6UM2-0	MTRJ Connector MM Duplex Ceramic Ferrule	Call
	MU Connector	
CON7US1-0	MU Connector SM Simplex Ceramic Ferrule	Call
	MPO/MTP Connector	
CON8AS12-0	MPOA Connector SM 12F	Call
CON8UM12-0	MPO Connector MM 12F	Call
	D4 Connector	
CON10US1-0	D4 Connector SM Simplex Ceramic Ferrule	Call
CON10UM1-0	D4 Connector MM Simplex Ceramic Ferrule	Call
	DIN Connector	
CON11US1-0	DIN Connector SM Simplex Ceramic Ferrule	Call

FIBER OPTIC

ADAPTER



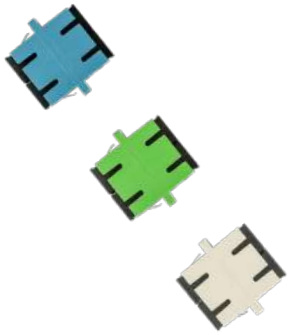
FC Adapter



SC Simplex Adapter



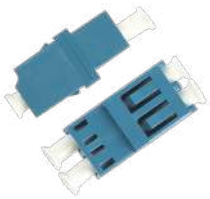
SC Simplex No Flange Adapter



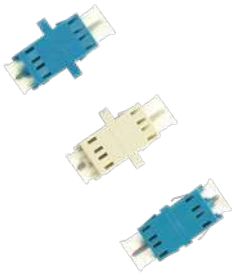
SC Duplex Adapter



ST Adapter



LC Simplex/Duplex Adapter



LC Duplex Adapter
(SC Footprint)



E2000 Adapter



MPO/MTP Adapter

Features :

- High precision zirconia ceramic or standard phosphor bronze sleeve
- Low insertion loss
- High repeatability and stability

General Specifications :

Insertion Loss (dB)	0.20 typical for SM 0.30 typical for MM
Operating Temperature (°C)	-40 to +75
Range Durability (dB)	<0.2 change after 500 matings

FIBER OPTIC

ADAPTER/HYBRID ADAPTER



FC Male / LC Female



FC Male / SC Female



FC Female / LC Female



FC Female / SC Female



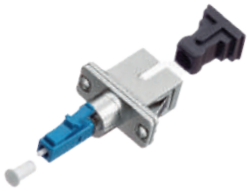
FC Female / ST Female



SC Female / LC Female



SCA Male/LC Female



SC Female / LC Male



SC Male/LC Female

Features :

- High precision zirconia ceramic or standard phosphor bronze sleeve
- Low insertion loss
- High repeatability and stability

General Specifications :

Insertion Loss (dB)	0.20 typical for SM 0.30 typical for MM
Operating Temperature (°C)	-40 to +75
Range Durability (dB)	<0.2 change after 500 matings

FIBER OPTIC

ADAPTER

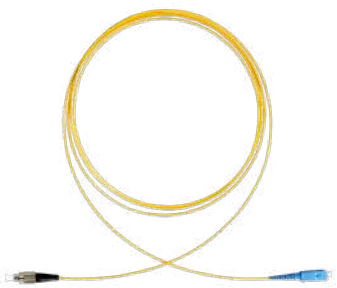
PART NO.	DESCRIPTIONS	PRICE
	FC Adapter	
AD1UB1-01	FC Adapter D-Hole Ceramic Sleeve	25.-
AD1UB1-41	FC Adapter Rectangle Ceramic Sleeve	40.-
AD1UB1-51	FC Adapter Square Ceramic Sleeve	40.-
	SC Adapter	
AD2US1-01	SC Adapter SM Simplex Ceramic Sleeve	20.-
AD2UM1-01	SC Adapter MM Simplex Ceramic Sleeve	20.-
AD2US2-01	SC Adapter SM Duplex Ceramic Sleeve	40.-
AD2UM2-01	SC Adapter MM Duplex Ceramic Sleeve	40.-
	ST Adapter	
AD3US1-01	ST Adapter SM Simplex Ceramic Sleeve	25.-
AD3UM1-01	ST Adapter MM Simplex Ceramic Sleeve	20.-
	LC Adapter	
AD6US1-01	LC Adapter SM Simplex Ceramic Sleeve	20.-
AD6UM1-01	LC Adapter MM Simplex Ceramic Sleeve	20.-
AD7US2-01	LC Adapter SM Duplex Ceramic Sleeve	40.-
AD7UM2-01	LC Adapter MM Duplex Ceramic Sleeve	40.-
AD4US2-01	LC Adapter SM Duplex Ceramic Sleeve (SC Footprint)	25.-
AD4UM2-01	LC Adapter MM Duplex Ceramic Sleeve (SC Footprint)	25.-
	E2000 Adapter	
AD5US1-01	E2000/UPC Adapter SM Simplex Ceramic Sleeve	Call
AD5AS1-01	E2000/APC Adapter SM Simplex Ceramic Sleeve	Call
	MPO/MTP Adapter (XX : Key Type, XX = UU (Up/Up), XX = UD (Up/Down))	
AD8NB24-XX	MPO Adapter 12/24F Key Up/Up, Key Up/Down	Call
AD9NB24-XX	MTP Adapter 12/24F Key Up/Up, Key Up/Down	Call
	Hybrid Adapter	
ADH12UUS1-001	FC Female/SC Female Hybrid SM Adapter	60.-
ADH12UUS1-201	FC Male/SC Female Hybrid SM Adapter	Call
ADH13UUS1-001	FC Female/ST Female Hybrid SM Adapter	60.-
ADH14UUS1-001	FC Female/LC Female Hybrid SM Adapter	Call
ADH14UUS1-201	FC Male/LC Female Hybrid SM Adapter	Call
ADH24UUS1-001	SC Female/LC Female Hybrid SM Adapter	Call

FIBER OPTIC

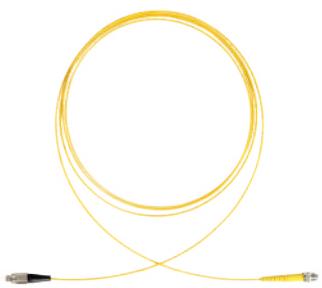
PATCH CORD/SINGLEMODE SIMPLEX PATCH CORD



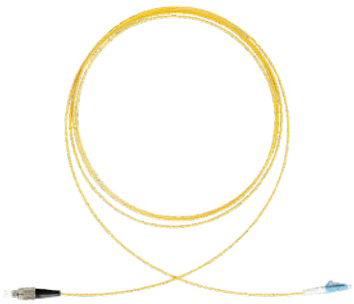
FC/FC Patch Cord



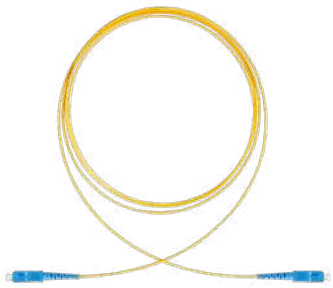
FC/SC Patch Cord



FC/ST Patch Cord



FC/LC Patch Cord



SC/SC Patch Cord



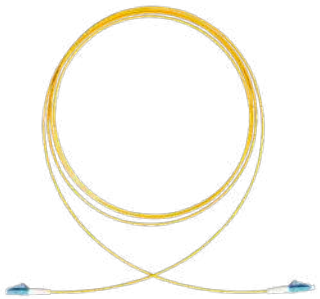
SC/ST Patch Cord



SC/LC Patch Cord



ST/LC Patch Cord



LC/LC Patch Cord

General Specifications :

Insertion Loss (dB)	≤0.20 typical (UPC) ≤0.30 typical (APC)
Return Loss (dB)	>50 (UPC) >60 (APC)
Operating Temperature (°C)	-40 to +75
Range Durability (dB)	<0.2 change after 500 matings
Core/Cladding (µm.)	9/125

Order Informations :

Fiber Core	: G.652D, G.655, G.657A2, G.657B3
Cable Jacket	: PVC, LSZH*
Cable Color	: Yellow, Blue, Green, Red, Black
Cable Diameter (mm.)	: 0.9, 2.0, 2.4, 3.0, 3.5
Connector Boot	: Long, Short
Polishing Grade	: UPC, APC

* LSZH = Low Smoke Zero Halogen

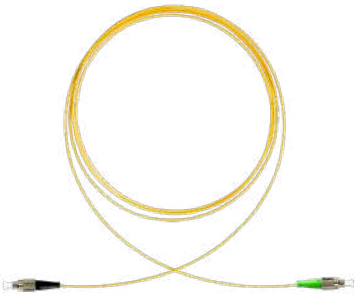
FIBER OPTIC

PATCH CORD/SINGLEMODE SIMPLEX PATCH CORD

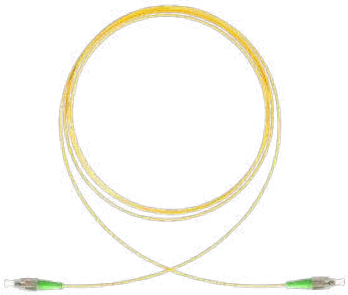
PART NO.	DESCRIPTIONS	PRICE
	Singlemode Simplex (X : Cable Diameter, X = 2 (2.0 mm), X = 3 (3.0 mm))	
PA11UU5-1-XM3-0	FC/FC Patch Cord SM Simplex 3M.	51.-
PA12UU5-1-XM3-0	FC/SC Patch Cord SM Simplex 3M.	51.-
PA14UU5-1-XM3-0	FC/LC Patch Cord SM Simplex 3M.	52.-
PA13UU5-1-XM3-0	FC/ST Patch Cord SM Simplex 3M.	50.-
PA22UU5-1-XM3-0	SC/SC Patch Cord SM Simplex 3M.	50.-
PA23UU5-1-XM3-0	SC/ST Patch Cord SM Simplex 3M.	50.-
PA24UU5-1-XM3-0	SC/LC Patch Cord SM Simplex 3M.	52.-
PA34UU5-1-XM3-0	ST/LC Patch Cord SM Simplex 3M.	51.-
PA33UU5-1-XM3-0	ST/ST Patch Cord SM Simplex 3M.	49.-
PA44UU5-1-XM3-0	LC/LC Patch Cord SM Simplex 3M.	53.-
PA51UU5-1-XM3-0	E2000/FC Patch Cord SM Simplex 3M.	190.-
PA52UU5-1-XM3-0	E2000/SC Patch Cord SM Simplex 3M.	191.-
PA54UU5-1-XM3-0	E2000/LC Patch Cord SM Simplex 3M.	194.-
PA55UU5-1-XM3-0	E2000/E2000 Patch Cord SM Simplex 3M.	292.-
PA101UU5-1-XM3-0	D4/FC Patch Cord SM Simplex 3M.	Call
PA102UU5-1-XM3-0	D4/SC Patch Cord SM Simplex 3M.	Call
PA104UU5-1-XM3-0	D4/LC Patch Cord SM Simplex 3M.	Call
PA103UU5-1-XM3-0	D4/ST Patch Cord SM Simplex 3M.	Call
PA111UU5-1-XM3-0	DIN/FC Patch Cord SM Simplex 3M.	Call
PA112UU5-1-XM3-0	DIN/SC Patch Cord SM Simplex 3M.	Call
PA114UU5-1-XM3-0	DIN/LC Patch Cord SM Simplex 3M.	Call
PA113UU5-1-XM3-0	DIN/ST Patch Cord SM Simplex 3M.	Call
PA71UU5-1-XM3-0	MU/FC Patch Cord SM Simplex 3M.	Call
PA72UU5-1-XM3-0	MU/SC Patch Cord SM Simplex 3M.	Call
PA74UU5-1-XM3-0	MU/LC Patch Cord SM Simplex 3M.	Call
PA73UU5-1-XM3-0	MU/ST Patch Cord SM Simplex 3M.	Call
	For additional length (Price / M.)	
	SM Simplex 2.0/3.0 length up to 40M.	3.00
	SM Simplex 2.0/3.0 length more than 40M. and up to 100M.	4.00
	SM Simplex 2.0/3.0 length more than 100M.	5.00
	For E2000 additional length (Price / M.)	
	SM Simplex 2.0/3.0 length up to 40M.	4.00
	SM Simplex 2.0/3.0 length more than 40M. and up to 100M.	5.00

FIBER OPTIC

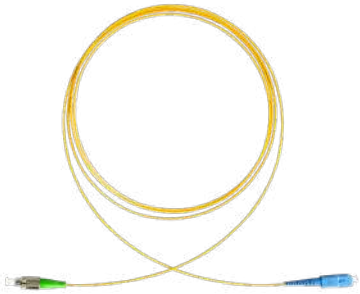
PATCH CORD/SINGLEMODE SIMPLEX PATCH CORD



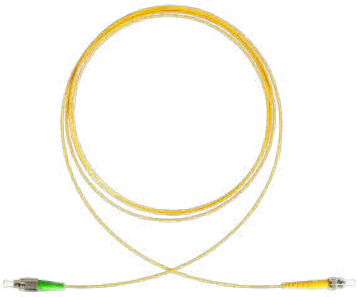
FC/FCA Patch Cord



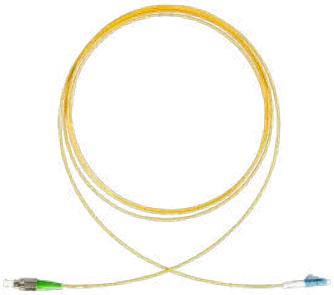
FCA/FCA Patch Cord



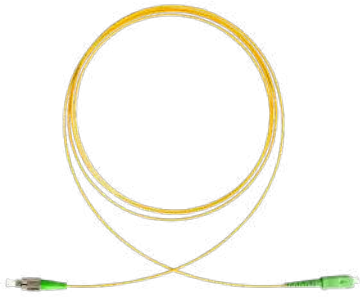
FCA/SC Patch Cord



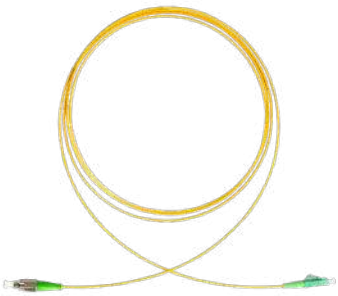
FCA/ST Patch Cord



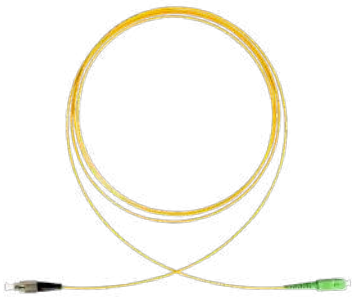
FCA/LC Patch Cord



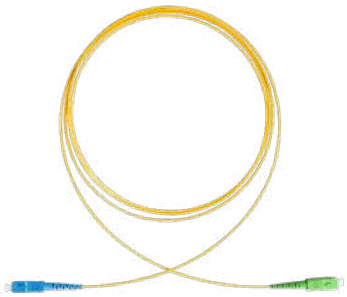
FCA/SCA Patch Cord



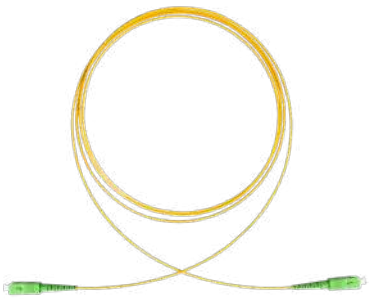
FCA/LCA Patch Cord



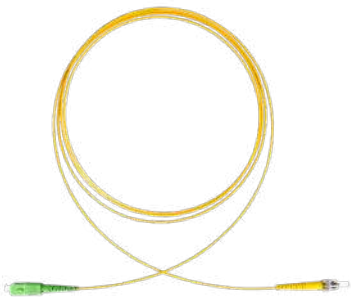
FC/SCA Patch Cord



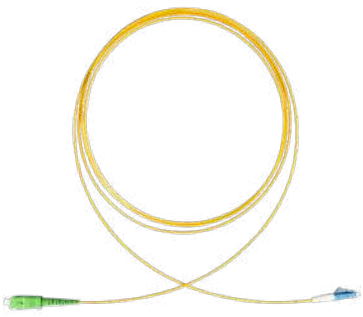
SC/SCA Patch Cord



SCA/SCA Patch Cord



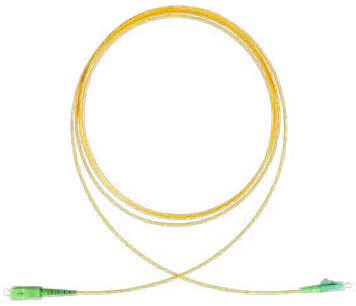
SCA/ST Patch Cord



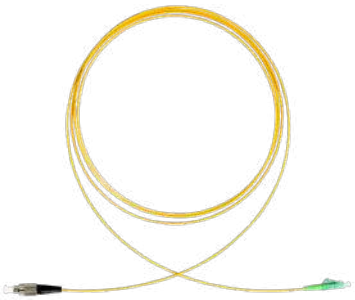
SCA/LC Patch Cord

FIBER OPTIC

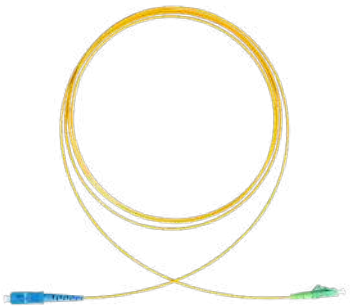
PATCH CORD/SINGLEMODE SIMPLEX PATCH CORD



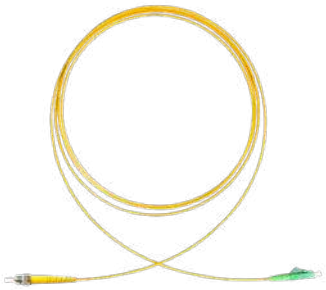
SCA/LCA Patch Cord



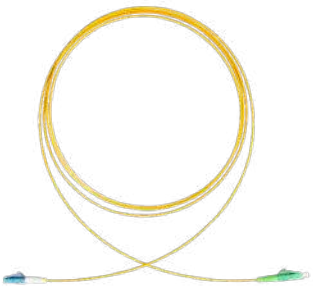
FC/LCA Patch Cord



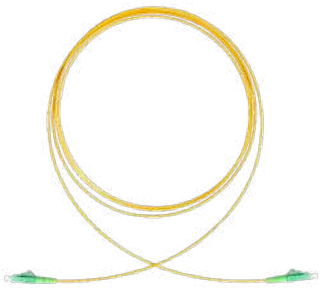
SC/LCA Patch Cord



ST/LCA Patch Cord



LC/LCA Patch Cord



LCA/LCA Patch Cord



SC/SCA G.657B3 Patch Cord



SC/SC G.657B3 Patch Cord



SCA/SCA G.657B3 Patch Cord

General Specifications :

Insertion Loss (dB)	≤0.20 typical (UPC) ≤0.30 typical (APC)
Return Loss (dB)	>50 (UPC) >60 (APC)
Operating Temperature (°C)	-40 to +75
Range Durability (dB)	<0.2 change after 500 matings
Core/Cladding (µm.)	9/125

Order Informations :

Fiber Core	: G.652D, G.655, G.657A2, G.657B3
Cable Jacket	: PVC, LSZH*
Cable Color	: Yellow, Blue, Green, Red, Black
Cable Diameter (mm.)	: 0.9, 2.0, 2.4, 3.0, 3.5
Connector Boot	: Long, Short
Polishing Grade	: UPC, APC

* LSZH = Low Smoke Zero Halogen

FIBER OPTIC

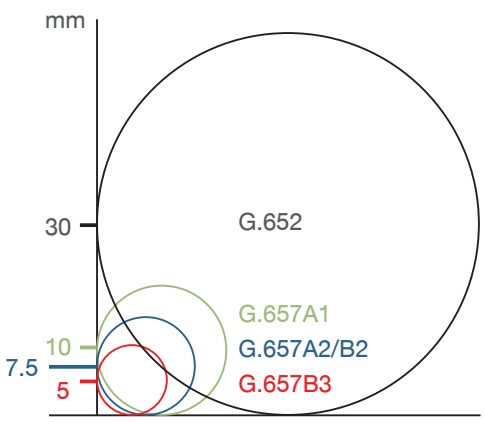
PATCH CORD/SINGLEMODE SIMPLEX PATCH CORD

PART NO.	DESCRIPTIONS	PRICE
	Singlemode Simplex (X : Cable Diameter, X = 2 (2.0 mm), X = 3 (3.0 mm))	
PA11UA5-1-XM3-0	FC/FCA Patch Cord SM Simplex 3M.	54.-
PA12UA5-1-XM3-0	FC/SCA Patch Cord SM Simplex 3M.	53.-
PA14UA5-1-XM3-0	FC/LCA Patch Cord SM Simplex 3M.	53.-
PA12AU5-1-XM3-0	FCA/SC Patch Cord SM Simplex 3M.	53.-
PA22AA5-1-XM3-0	SCA/SCA Patch Cord SM Simplex 3M.	55.-
PA24AU5-1-XM3-0	SCA/LC Patch Cord SM Simplex 3M.	54.-
PA24AA5-1-XM3-0	SCA/LCA Patch Cord SM Simplex 3M.	54.-
PA24UA5-1-XM3-0	SC/LCA Patch Cord SM Simplex 3M.	53.-
PA44AA5-1-XM3-0	LCA/LCA Patch Cord SM Simplex 3M.	54.-
PA51AU5-1-XM3-0	E2000A/FC Patch Cord SM Simplex 3M.	200.-
PA52AU5-1-XM3-0	E2000A/SC Patch Cord SM Simplex 3M.	201.-
PA54AU5-1-XM3-0	E2000A/LC Patch Cord SM Simplex 3M.	204.-
PA55AA5-1-XM3-0	E2000A/E2000A Patch Cord SM Simplex 3M.	321.-
PA22AA8-1-3.5M3-0	SCA/SCA Patch Cord SM G.657B3 Simplex 3.5 3M Black	75.-
PA22UA8-1-3.5M3-0	SC/SCA Patch Cord SM G.657B3 Simplex 3.5 3M Black	75.-
PA22UU8-1-3.5M3-0	SC/SC Patch Cord SM G.657B3 Simplex 3.5 3M Black	75.-
	For additional length (Price / M.)	
	SM Simplex 2.0/3.0 length up to 40M.	3.00
	SM Simplex 2.0/3.0 length more than 40M. and up to 100M.	4.00
	SM Simplex 2.0/3.0 length more than 100M.	5.00
	SM Simplex 3.5 length up to 40M.	10.00
	For E2000 additional length (Price / M.)	
	SM Simplex 2.0/3.0 length up to 40M	4.00
	SM Simplex 2.0/3.0 length more than 40M. and up to 100M.	5.00

TIP

- มาตรฐาน ITU-T G.657 ส่วนหลักถูกแบ่งออกเป็น :
  - Ø Category A สายไฟเบอร์สำหรับโครงข่าย
  - Ø Category B สายไฟเบอร์ระยะสั้นๆ ใช้ตอนปลายของโครงข่ายในสภาพแวดล้อมต่างๆ เช่น อาคาร บ้านพัก
- ในแต่ละ Category (A และ B) แบ่งออกเป็น 2 หมวดย่อย ดังนี้ :
  - Ø G.657A1 และ G.657A2
  - Ø G.657B2 และ G.657B3
- ในหมวดย่อย มีรัศมีของการดัดงอต่ำสุดตาม :
  - ▶ G.657A1: 10 mm
  - ▶ G.657A2: 7.5 mm
  - ▶ G.657B2: 7.5 mm
  - ▶ G.657B3: 5 mm

Figure - Relevant specified bending radius for ITU-T G.652 and ITU-T G.657

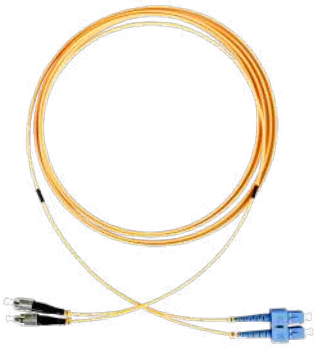


FIBER OPTIC

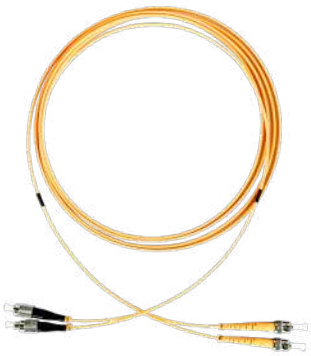
PATCH CORD/SINGLEMODE DUPLEX PATCH CORD



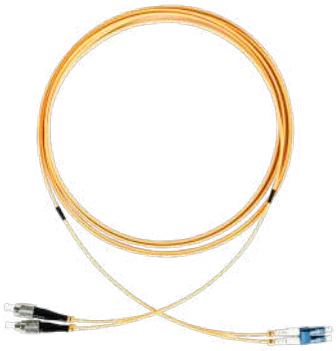
FC/FC Patch Cord



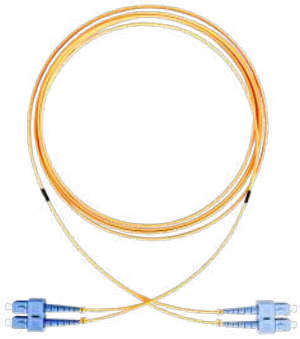
FC/SC Patch Cord



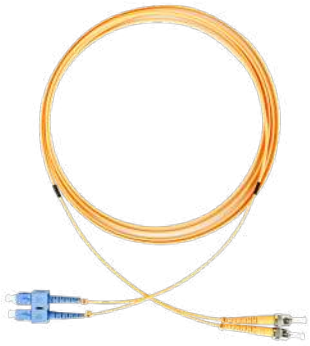
FC/ST Patch Cord



FC/LC Patch Cord



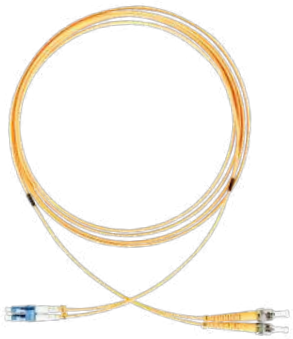
SC/SC Patch Cord



SC/ST Patch Cord



SC/LC Patch Cord



ST/LC Patch Cord



LC/LC Patch Cord

General Specifications :

Insertion Loss (dB)	≤0.20 typical (UPC) ≤0.30 typical (APC)
Return Loss (dB)	>50 (UPC) >60 (APC)
Operating Temperature (°C)	-40 to +75
Range Durability (dB)	<0.2 change after 500 matings
Core/Cladding (µm.)	9/125

Order Informations :

Fiber Core	: G.652D, G.655, G.657A2, G.657B3
Cable Jacket	: PVC, LSZH*
Cable Color	: Yellow, Blue, Green, Red
Cable Diameter (mm.)	: 2.0, 2.4, 3.0
Connector Boot	: Long, Short
Polishing Grade	: UPC, APC

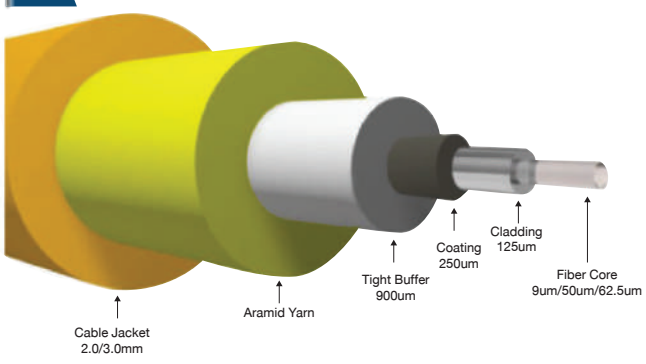
* LSZH = Low Smoke Zero Halogen

FIBER OPTIC

PATCH CORD/SINGLEMODE DUPLEX PATCH CORD

PART NO.	DESCRIPTIONS	PRICE
	Singlemode Duplex (X : Cable Diameter, X = 2 (2.0 mm), X = 3 (3.0 mm))	
PA11UU5-2-XM3-0	FC/FC Patch Cord SM Duplex 3M.	106.-
PA12UU5-2-XM3-0	FC/SC Patch Cord SM Duplex 3M.	105.-
PA14UU5-2-XM3-0	FC/LC Patch Cord SM Duplex 3M.	107.-
PA22UU5-2-XM3-0	SC/SC Patch Cord SM Duplex 3M.	104.-
PA24UU5-2-XM3-0	SC/LC Patch Cord SM Duplex 3M.	107.-
PA44UU5-2-XM3-0	LC/LC Patch Cord SM Duplex 3M.	109.-
PA61UU5-2-XM3-0	MTRJ/FC Patch Cord SM Duplex 3M.	246.-
PA62UU5-2-XM3-0	MTRJ/SC Patch Cord SM Duplex 3M.	244.-
PA64UU5-2-XM3-0	MTRJ/LC Patch Cord SM Duplex 3M.	251.-
PA63UU5-2-XM3-0	MTRJ/ST Patch Cord SM Duplex 3M.	241.-
PA66UU5-2-XM3-0	MTRJ/MTRJ Patch Cord SM Duplex 3M.	263.-
PA31UU5-2-XM3-0	ST/FC Patch Cord SM Duplex 3M.	104.-
PA32UU5-2-XM3-0	ST/SC Patch Cord SM Duplex 3M.	102.-
PA34UU5-2-XM3-0	ST/LC Patch Cord SM Duplex 3M.	105.-
PA33UU5-2-XM3-0	ST/ST Patch Cord SM Duplex 3M.	102.-
PA51UU5-2-XM3-0	E2000/FC Patch Cord SM Duplex 3M.	381.-
PA52UU5-2-XM3-0	E2000/SC Patch Cord SM Duplex 3M.	382.-
PA54UU5-2-XM3-0	E2000/LC Patch Cord SM Duplex 3M.	388.-
PA55UU5-2-XM3-0	E2000/E2000 Patch Cord SM Duplex 3M.	584.-
	For additional length (Price / M.)	
	SM Duplex 2.0/3.0 length up to 40M.	5.00
	SM Duplex 2.0/3.0 length more than 40M. and up to 100M.	6.00
	SM Duplex 2.0/3.0 length more than 100M.	7.00
	For E2000 additional length (Price / M.)	
	SM Duplex 2.0/3.0 length up to 40M.	8.00
	SM Duplex 2.0/3.0 length more than 40M. and up to 100M.	9.00

TIP Optical Fiber Patch Cord Structure



FIBER OPTIC

PATCH CORD/SINGLEMODE DUPLEX PATCH CORD



FC/FCA Patch Cord



FCA/FCA Patch Cord



FCA/SC Patch Cord



FCA/ST Patch Cord



FCA/LC Patch Cord



FCA/SCA Patch Cord



FCA/LCA Patch Cord



FC/SCA Patch Cord



SC/SCA Patch Cord



SCA/SCA Patch Cord



SCA/ST Patch Cord



SCA/LC Patch Cord

FIBER OPTIC

PATCH CORD/SINGLEMODE DUPLEX PATCH CORD



SCA/LCA Patch Cord



FC/LCA Patch Cord



SC/LCA Patch Cord



ST/LCA Patch Cord



LC/LCA Patch Cord



LCA/LCA Patch Cord

General Specifications :

Insertion Loss (dB)	≤0.20 typical (UPC) ≤0.30 typical (APC)
Return Loss (dB)	>50 (UPC) >60 (APC)
Operating Temperature (°C)	-40 to +75
Range Durability (dB)	<0.2 change after 500 matings
Core/Cladding (µm.)	9/125

Order Informations :

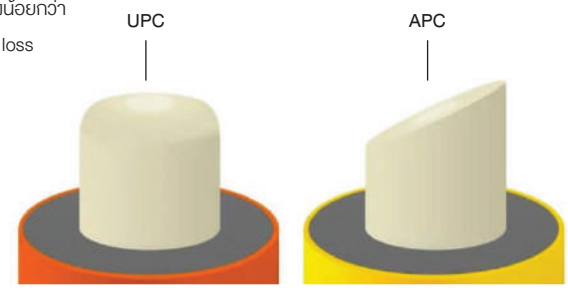
Fiber Core	: G.652D, G.655, G.657A2, G.657B3
Cable Jacket	: PVC, LSZH*
Cable Color	: Yellow, Blue, Green, Red
Cable Diameter (mm.)	: 2.0, 2.4, 3.0
Connector Boot	: Long, Short
Polishing Grade	: UPC, APC

* LSZH = Low Smoke Zero Halogen

TIP

ความแตกต่างระหว่างหัวต่อแบบ UPC และ APC

สำหรับหัวต่อแบบ UPC ปลายสาย Fiber จะเป็นแบบตัดตรง จึงทำให้แสงจะสะท้อนกลับไปรบกวนแสงจากแหล่งกำเนิดแสงได้มากกว่าส่วนหัวต่อแบบ APC เนื่องจากปลายสาย Fiber จะเอียงเป็นมุม 8 องศา จึงทำให้แสงสะท้อนกลับไปรบกวนแหล่งกำเนิดแสงน้อยกว่า ดังนั้นหัวต่อแบบ APC จึงมีค่า return loss ที่ดีกว่า โดยมีค่าอย่างน้อยอยู่ที่ -60 dB ส่วนหัวต่อแบบ UPC จะมีค่า return loss ด้อยกว่าโดยมีค่าอย่างน้อยอยู่ที่ -50 dB



FIBER OPTIC

PATCH CORD/SINGLEMODE DUPLEX PATCH CORD

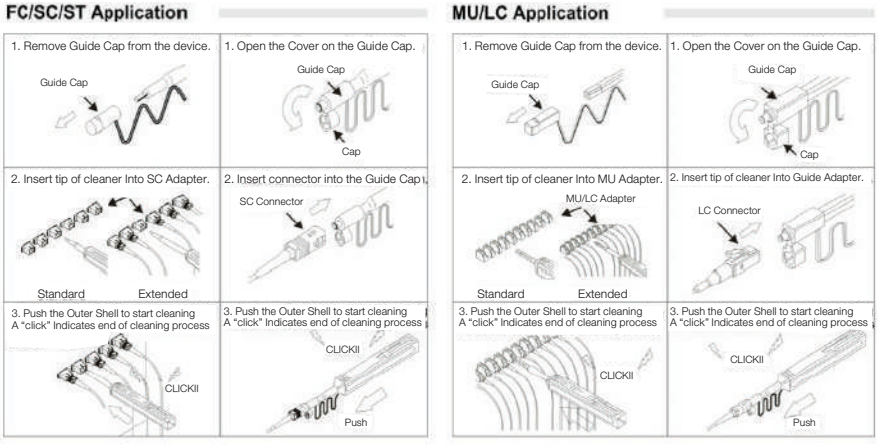
PART NO.	DESCRIPTIONS	PRICE
	Singlemode Duplex (X : Cable Diameter, X = 2 (2.0 mm), X = 3 (3.0 mm))	
PA11UA5-2-XM3-0	FC/FCA Patch Cord SM Duplex 3M.	111.-
PA12UA5-2-XM3-0	FC/SCA Patch Cord SM Duplex 3M.	109.-
PA14UA5-2-XM3-0	FC/LCA Patch Cord SM Duplex 3M.	109.-
PA12AU5-2-XM3-0	FCA/SC Patch Cord SM Duplex 3M.	109.-
PA22AA5-2-XM3-0	SCA/SCA Patch Cord SM Duplex 3M.	113.-
PA24AA5-2-XM3-0	SCA/LCA Patch Cord SM Duplex 3M.	113.-
PA24AU5-2-XM3-0	SCA/LC Patch Cord SM Duplex 3M.	111.-
PA24UA5-2-XM3-0	SC/LCA Patch Cord SM Duplex 3M.	108.-
PA44AA5-2-XM3-0	LCA/LCA Patch Cord SM Duplex 3M.	112.-
PA51AU5-2-XM3-0	E2000A/FC Patch Cord SM Duplex 3M.	400.-
PA52AU5-2-XM3-0	E2000A/SC Patch Cord SM Duplex 3M.	401.-
PA54AU5-2-XM3-0	E2000A/LC Patch Cord SM Duplex 3M.	407.-
PA55AA5-2-XM3-0	E2000A/E2000A Patchcord SM Duplex 3M.	642.-
	For additional length (Price / M.)	
	SM Duplex 2.0/3.0 length up to 40M.	5.00
	SM Duplex 2.0/3.0 length more than 40M. and up to 100M.	6.00
	SM Duplex 2.0/3.0 length more than 100M.	7.00
	For E2000 additional length (Price / M.)	
	SM Duplex 2.0/3.0 length up to 40M.	8.00
	SM Duplex 2.0/3.0 length more than 40M. and up to 100M.	9.00

TIP

ปากกาทำความสะอาดหัวต่อ Fiber Optic (Fiber Optic Cleaner Pen)

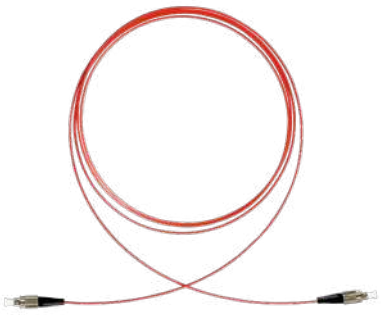
ปากกาทำความสะอาดหัวต่อ Fiber Optic ถูกออกแบบมาเพื่อใช้ในการทำความสะอาดหัวต่อของสาย Fiber Optic ซึ่งอุปกรณ์จะทำความสะอาดหน้าสัมผัสของ Fiber Optic ที่ตัว ferrule โดยจะกำจัดฝุ่น คราบน้ำมัน และเศษสิ่งสกปรกต่าง ๆ และจะไม่ทำให้หน้าสัมผัสของ Fiber Optic เป็นรอย และเสียหาย สำหรับปากกาขนาด 2.5 มม. จะใช้ทำความสะอาดหัวต่อแบบ FC/SC/ST ส่วนปากกาขนาด 1.25 มม. จะใช้ทำความสะอาดหัวต่อแบบ LC/MU



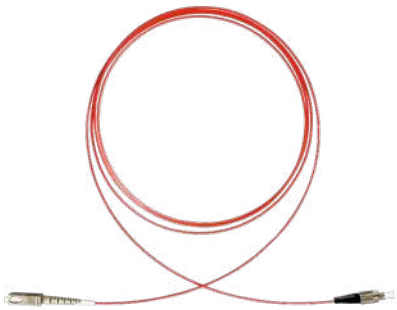


FIBER OPTIC

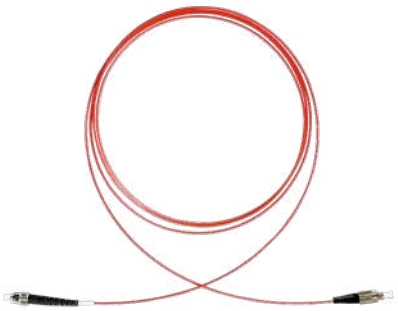
PATCH CORD/MULTIMODE SIMPLEX PATCH CORD



FC/FC Patch Cord



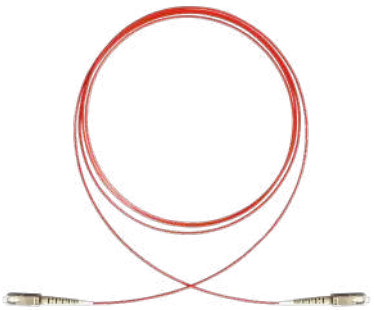
FC/SC Patch Cord



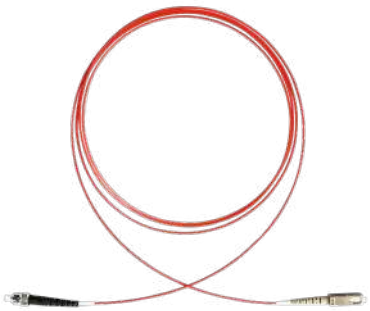
FC/ST Patch Cord



FC/LC Patch Cord



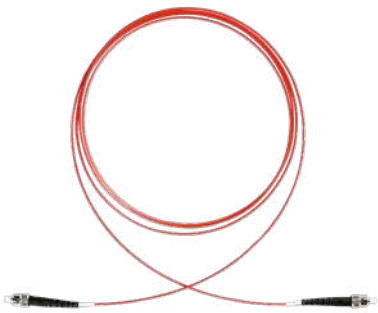
SC/SC Patch Cord



SC/ST Patch Cord



SC/LC Patch Cord



ST/ST Patch Cord



ST/LC Patch Cord



LC/LC Patch Cord

General Specifications :

Insertion Loss (dB)	≤0.30 typical
Operating Temperature (°C)	-40 to +75
Range Durability (dB)	<0.2 change after 500 matings
Cable Color	Orange
Polishing Grade	UPC

Order Informations :

Cable Jacket	: PVC, LSZH*
Cable Diameter (mm.)	: 0.9, 2.0, 2.4, 3.0
Core/Cladding (µm.)	: 50/125, 62.5/125
Connector Boot	: Long, Short

* LSZH = Low Smoke Zero Halogen

FIBER OPTIC

PATCH CORD/MULTIMODE SIMPLEX PATCH CORD

PART NO.	DESCRIPTIONS	PRICE
	Multimode Simplex (X : Cable Diameter, X = 2 (2.0 mm), X = 3 (3.0 mm))	
PA11UU2-1-XM3-0	FC/FC Patch Cord MM Simplex 3M.	86.-
PA12UU2-1-XM3-0	FC/SC Patch Cord MM Simplex 3M.	83.-
PA14UU2-1-XM3-0	FC/LC Patch Cord MM Simplex 3M.	86.-
PA13UU2-1-XM3-0	FC/ST Patch Cord MM Simplex 3M.	82.-
PA22UU2-1-XM3-0	SC/SC Patch Cord MM Simplex 3M.	82.-
PA23UU2-1-XM3-0	SC/ST Patch Cord MM Simplex 3M.	80.-
PA24UU2-1-XM3-0	SC/LC Patch Cord MM Simplex 3M.	84.-
PA33UU2-1-XM3-0	ST/ST Patch Cord MM Simplex 3M.	80.-
PA34UU2-1-XM3-0	ST/LC Patch Cord MM Simplex 3M.	83.-
PA44UU2-1-XM3-0	LC/LC Patch Cord MM Simplex 3M.	86.-
	For additional length (Price / M.)	
	MM Simplex 2.0/3.0 length up to 40M.	6.00
	MM Simplex 2.0/3.0 length more than 40M. and up to 100M.	7.00
	MM Simplex 2.0/3.0 length more than 100M.	8.00

TIP

ประเภทสาย Fiber Optic แบบ Multimode

สาย Fiber Optic แบบ Multimode จะมีขนาดของ Core/Cladding ทั้ง 62.5/125 ไมโครเมตร (um) และ 50/125 ไมโครเมตร (um) ในปัจจุบันจะมีการแยกกลุ่มของสายประเภทนี้ด้วยตัวอักษร OM ซึ่งย่อมาจากคำว่า Optical Multimode โดยแยกเป็น OM1, OM2, OM3, OM4 และ OM5 ตามการพัฒนาคุณสมบัติของสายที่ดีขึ้น และสามารถแยกความแตกต่างของสาย Fiber ตามขนาดของ Core/Cladding ได้ดังนี้

- สาย Fiber OM1 จะมีเปลือกนอก (jacket) เป็นสีส้ม และมีขนาด core 62.5 ไมโครเมตร (um) ขนาด cladding 125 ไมโครเมตร (um)
- สาย Fiber OM2 จะมีเปลือกนอก (jacket) เป็นสีส้ม และมีขนาด core 50 ไมโครเมตร (um)ขนาด cladding 125 ไมโครเมตร (um)
- สาย Fiber OM3 จะมีเปลือกนอก (jacket) เป็นสีน้ำทะเล (Aqua) และมีขนาด core 50 ไมโครเมตร (um) ขนาด cladding 125 ไมโครเมตร (um)
- สาย Fiber OM4 จะมีเปลือกนอก (jacket) เป็นสีน้ำทะเล (Aqua) และมีขนาด core 50 ไมโครเมตร (um) ขนาด cladding 125 ไมโครเมตร (um)
- สาย Fiber OM5 จะมีเปลือกนอก (jacket) เป็นสีเขียวมะนาว (Lime Green) และมีขนาด core 50 ไมโครเมตร (um) ขนาด cladding 125 ไมโครเมตร (um)

ตารางแสดงความแตกต่างในส่วนของลักษณะของสาย และแหล่งกำเนิดแสงที่นำมาใช้งานสำหรับ Fiber Optic แบบ Multimode

NAME	Diameter	Jacket Colors	Optical Source	Bandwidth
OM1	62.5/125 um	Orange	LED	200MHz*km
OM2	50/125 um	Orange	LED	500MHz*km
OM3	50/125 um	Aqua	VCSEL	2000MHz*km
OM4	50/125 um	Aqua	VCSEL	4700MHz*km
OM5	50/125 um	Lime Green	VCSEL	4700MHz*km@850nm, 2470MHz*km@953nm

FIBER OPTIC

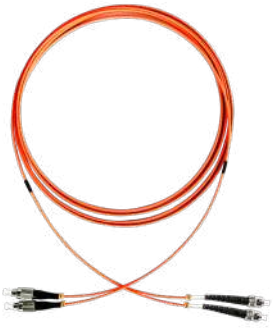
PATCH CORD/MULTIMODE DUPLEX PATCH CORD



FC/FC Patch Cord



FC/SC Patch Cord



FC/ST Patch Cord



FC/LC Patch Cord



SC/SC Patch Cord



SC/ST Patch Cord



SC/LC Patch Cord



ST/ST Patch Cord



ST/LC Patch Cord



LC/LC Patch Cord

General Specifications :

Insertion Loss (dB)	≤0.30 typical
Operating Temperature (°C)	-40 to +75
Range Durability (dB)	<0.2 change after 500 matings
Cable Color	Orange
Polishing Grade	UPC

Order Informations :

Cable Jacket	: PVC, LSZH*
Cable Diameter (mm.)	: 2.0, 2.4, 3.0
Core/Cladding (µm.)	: 50/125, 62.5/125
Connector Boot	: Long, Short

* LSZH = Low Smoke Zero Halogen

FIBER OPTIC

PATCH CORD/MULTIMODE DUPLEX PATCH CORD

PART NO.	DESCRIPTIONS	PRICE
	Multimode Duplex (X : Cable Diameter, X = 2 (2.0 mm), X = 3 (3.0 mm))	
PA11UU2-2-XM3-0	FC/FC Patch Cord MM Duplex 3M.	179.-
PA12UU2-2-XM3-0	FC/SC Patch Cord MM Duplex 3M.	171.-
PA14UU2-2-XM3-0	FC/LC Patch Cord MM Duplex 3M.	179.-
PA13UU2-2-XM3-0	FC/ST Patch Cord MM Duplex 3M.	170.-
PA22UU2-2-XM3-0	SC/SC Patch Cord MM Duplex 3M.	169.-
PA24UU2-2-XM3-0	SC/LC Patch Cord MM Duplex 3M.	174.-
PA23UU2-2-XM3-0	SC/ST Patch Cord MM Duplex 3M.	166.-
PA33UU2-2-XM3-0	ST/ST Patch Cord MM Duplex 3M.	165.-
PA34UU2-2-XM3-0	ST/LC Patch Cord MM Duplex 3M.	171.-
PA44UU2-2-XM3-0	LC/LC Patch Cord MM Duplex 3M.	179.-
	For additional length (Price / M.)	
	MM Duplex 2.0/3.0 length up to 40M.	12.00
	MM Duplex 2.0/3.0 length more than 40M. and up to 100M.	13.00
	MM Duplex 2.0/3.0 length more than 100M.	14.00

TIP

ตารางแสดงความแตกต่างในการรับส่งข้อมูลของสาย Fiber Optic แบบ Multimode

NAME	100MB	1000BASE-SX	10GBASE-S	40GBASE-SR4	100GBASE-SR10
OM1	2000m	275m	33m	Not specified	Not specified
OM2	2000m	550m	82m	Not specified	Not specified
OM3	2000m	550m	300m	100m	100m
OM4	2000m	550m	400m	150m	150m

การเปรียบเทียบ Application ของ Fiber Optic Multimode OM1, OM2, OM3 และ OM4

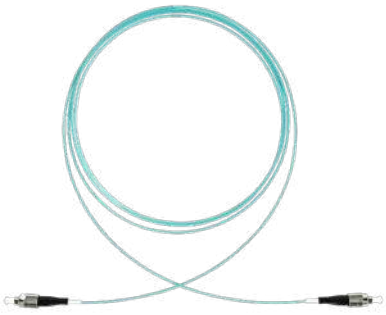
สาย Fiber Optic Multimode OM1 และ OM2 มีการปรับใช้งานอย่างกว้างขวางเป็นเวลาหลายปี ในด้านการสร้าง Application เพื่อให้รองรับการส่งข้อมูล Ethernet สูงสุดที่ 1GB ส่วนสาย Fiber Optic Multimode OM3 และ OM4 มักจะใช้กับ Application ที่มีการส่งข้อมูล Ethernet ในระดับ 10G รวมทั้งระดับ 40G และ 100G ด้วย

OM3 & OM4 เหนือกว่า OM1 & OM2

ทั้ง OM1 และ OM2 จะทำงานร่วมกับอุปกรณ์ที่ใช้แหล่งกำเนิดแสงแบบ LED ส่วน OM3 และ OM4 จะทำงานร่วมกับอุปกรณ์ที่ใช้แหล่งกำเนิดแสงแบบ VCSELs ซึ่งจะรองรับ Application ที่ต้องการส่งข้อมูลที่มีแบนด์วิธสูง ๆ ได้ดีกว่า

FIBER OPTIC

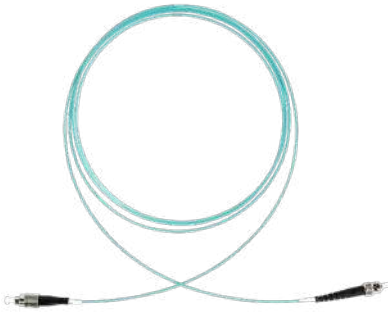
PATCH CORD/MULTIMODE OM3/OM4 SIMPLEX PATCH CORD



FC/FC Patch Cord



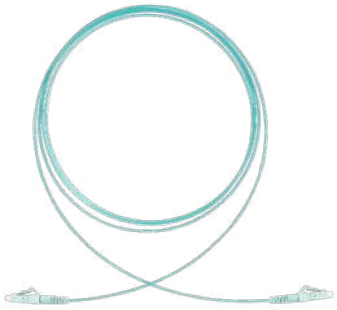
FC/SC Patch Cord



FC/ST Patch Cord



FC/LC Patch Cord



LC/LC Patch Cord



SC/SC Patch Cord



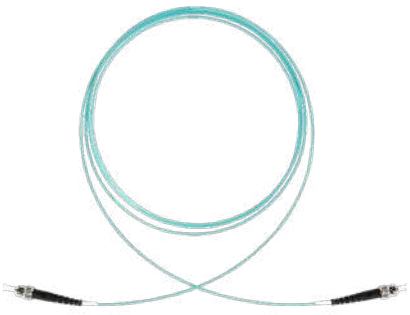
SC/ST Patch Cord



SC/LC Patch Cord



ST/LC Patch Cord



ST/ST Patch Cord

General Specifications :

Insertion Loss (dB)	≤0.30 typical
Operating Temperature (°C)	-40 to +75
Range Durability (dB)	<0.2 change after 500 matings
Cable Color	Aqua
Core/Cladding (um.)	50/125
Polishing Grade	UPC

Order Informations :

Cable Jacket	: PVC, LSZH*
Cable Diameter (mm.)	: 0.9, 2.0, 2.4, 3.0
Cable Type	: OM3, OM4
Connector Color	: Beige, Aqua for LC type
Connector Boot	: Long, Short

* LSZH = Low Smoke Zero Halogen

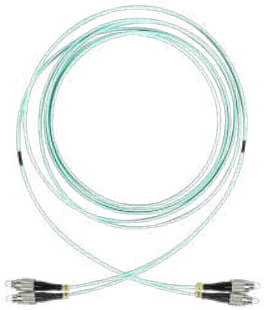
FIBER OPTIC

PATCH CORD/MULTIMODE OM3/OM4 SIMPLEX PATCH CORD

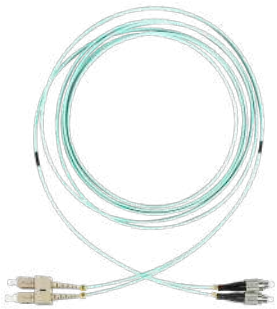
PART NO.	DESCRIPTIONS	PRICE
	Multimode OM3 Simplex (X : Cable Diameter, X = 2 (2.0 mm), X = 3 (3.0 mm))	
PA11UU3-1-XM3-0	FC/FC Patch Cord MM OM3 Simplex 3M.	112.-
PA12UU3-1-XM3-0	FC/SC Patch Cord MM OM3 Simplex 3M.	109.-
PA14UU3-1-XM3-0	FC/LC Patch Cord MM OM3 Simplex 3M.	112.-
PA13UU3-1-XM3-0	FC/ST Patch Cord MM OM3 Simplex 3M.	112.-
PA22UU3-1-XM3-0	SC/SC Patch Cord MM OM3 Simplex 3M.	106.-
PA23UU3-1-XM3-0	SC/ST Patch Cord MM OM3 Simplex 3M.	109.-
PA24UU3-1-XM3-0	SC/LC Patch Cord MM OM3 Simplex 3M.	109.-
PA33UU3-1-XM3-0	ST/ST Patch Cord MM OM3 Simplex 3M.	112.-
PA34UU3-1-XM3-0	ST/LC Patch Cord MM OM3 Simplex 3M.	112.-
PA44UU3-1-XM3-0	LC/LC Patch Cord MM OM3 Simplex 3M.	112.-
	For additional length (Price / M.)	
	MM OM3 Simplex 2.0/3.0 length up to 40M.	12.00
	MM OM3 Simplex 2.0/3.0 length more than 40M. and up to 100M.	13.00
	MM OM3 Simplex 2.0/3.0 length more than 100M.	14.00
	Multimode OM4 Simplex (X : Cable Diameter, X = 2 (2.0 mm), X = 3 (3.0 mm))	
PA11UU4-1-XM3-0	FC/FC Patch Cord MM OM4 Simplex 3M.	119.-
PA12UU4-1-XM3-0	FC/SC Patch Cord MM OM4 Simplex 3M.	119.-
PA14UU4-1-XM3-0	FC/LC Patch Cord MM OM4 Simplex 3M.	119.-
PA13UU4-1-XM3-0	FC/ST Patch Cord MM OM4 Simplex 3M.	119.-
PA22UU4-1-XM3-0	SC/SC Patch Cord MM OM4 Simplex 3M.	119.-
PA23UU4-1-XM3-0	SC/ST Patch Cord MM OM4 Simplex 3M.	119.-
PA24UU4-1-XM3-0	SC/LC Patch Cord MM OM4 Simplex 3M.	119.-
PA33UU4-1-XM3-0	ST/ST Patch Cord MM OM4 Simplex 3M.	119.-
PA34UU4-1-XM3-0	ST/LC Patch Cord MM OM4 Simplex 3M.	119.-
PA44UU4-1-XM3-0	LC/LC Patch Cord MM OM4 Simplex 3M.	119.-
	For additional length (Price / M.)	
	MM OM4 Simplex 2.0/3.0 length up to 40M.	15.00
	MM OM4 Simplex 2.0/3.0 length more than 40M. and up to 100M.	16.00
	MM OM4 Simplex 2.0/3.0 length more than 100M.	17.00

FIBER OPTIC

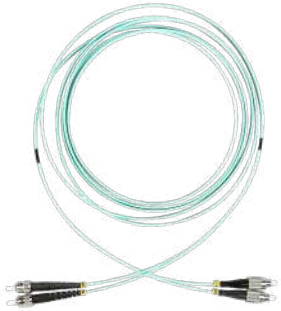
PATCH CORD/MULTIMODE OM3/OM4 DUPLEX PATCH CORD



FC/FC Patch Cord



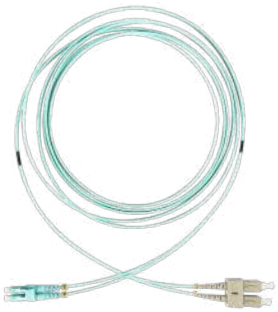
FC/SC Patch Cord



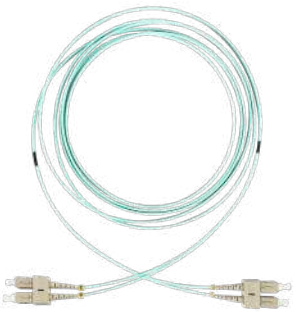
FC/ST Patch Cord



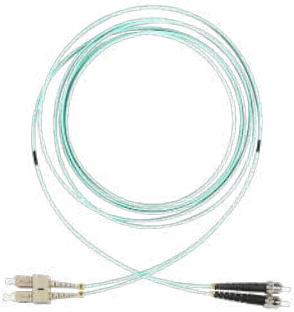
FC/LC Patch Cord



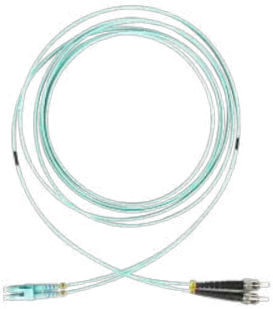
SC/LC Patch Cord



SC/SC Patch Cord



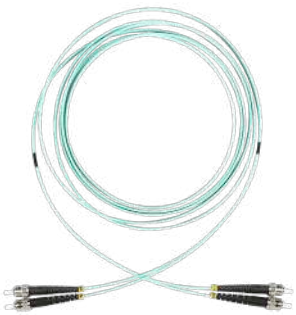
SC/ST Patch Cord



ST/LC Patch Cord



LC/LC Patch Cord



ST/ST Patch Cord

General Specifications :

Insertion Loss (dB)	≤0.30 typical
Operating Temperature (°C)	-40 to +75
Range Durability (dB)	<0.2 change after 500 matings
Cable Color	Aqua
Core/Cladding (um.)	50/125
Polishing Grade	UPC

Order Informations :

Cable Jacket	: PVC, LSZH*
Cable Diameter (mm.)	: 2.0, 2.4, 3.0
Cable Type	: OM3, OM4
Connector Color	: Beige, Aqua for LC type
Connector Boot	: Long, Short

* LSZH = Low Smoke Zero Halogen

FIBER OPTIC

PATCH CORD/MULTIMODE OM3/OM4 DUPLEX PATCH CORD

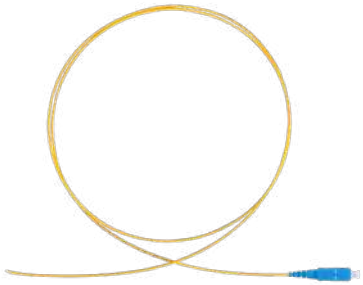
PART NO.	DESCRIPTIONS	PRICE
	Multimode OM3 Duplex (X : Cable Diameter, X = 2 (2.0 mm), X = 3 (3.0 mm))	
PA11UU3-2-XM3-0	FC/FC Patch Cord MM OM3 Duplex 3M.	229.-
PA12UU3-2-XM3-0	FC/SC Patch Cord MM OM3 Duplex 3M.	223.-
PA14UU3-2-XM3-0	FC/LC Patch Cord MM OM3 Duplex 3M.	229.-
PA13UU3-2-XM3-0	FC/ST Patch Cord MM OM3 Duplex 3M.	229.-
PA22UU3-2-XM3-0	SC/SC Patch Cord MM OM3 Duplex 3M.	217.-
PA23UU3-2-XM3-0	SC/ST Patch Cord MM OM3 Duplex 3M.	223.-
PA24UU3-2-XM3-0	SC/LC Patch Cord MM OM3 Duplex 3M.	223.-
PA33UU3-2-XM3-0	ST/ST Patch Cord MM OM3 Duplex 3M.	229.-
PA34UU3-2-XM3-0	ST/LC Patch Cord MM OM3 Duplex 3M.	229.-
PA44UU3-2-XM3-0	LC/LC Patch Cord MM OM3 Duplex 3M.	229.-
	For additional length (Price / M.)	
	MM OM3 Duplex 2.0/3.0 length up to 40M.	23.00
	MM OM3 Duplex 2.0/3.0 length more than 40M. and up to 100M.	24.00
	MM OM3 Duplex 2.0/3.0 length more than 100M.	25.00
	Multimode OM4 Duplex (X : Cable Diameter, X = 2 (2.0 mm), X = 3 (3.0 mm))	
PA11UU4-2-XM3-0	FC/FC Patch Cord MM OM4 Duplex 3M.	244.-
PA12UU4-2-XM3-0	FC/SC Patch Cord MM OM4 Duplex 3M.	244.-
PA14UU4-2-XM3-0	FC/LC Patch Cord MM OM4 Duplex 3M.	244.-
PA13UU4-2-XM3-0	FC/ST Patch Cord MM OM4 Duplex 3M.	244.-
PA22UU4-2-XM3-0	SC/SC Patch Cord MM OM4 Duplex 3M.	244.-
PA23UU4-2-XM3-0	SC/ST Patch Cord MM OM4 Duplex 3M.	244.-
PA24UU4-2-XM3-0	SC/LC Patch Cord MM OM4 Duplex 3M.	244.-
PA33UU4-2-XM3-0	ST/ST Patch Cord MM OM4 Duplex 3M.	244.-
PA34UU4-2-XM3-0	ST/LC Patch Cord MM OM4 Duplex 3M.	244.-
PA44UU4-2-XM3-0	LC/LC Patch Cord MM OM4 Duplex 3M.	244.-
	For additional length (Price / M.)	
	MM OM4 Duplex 2.0/3.0 length up to 40M.	28.00
	MM OM4 Duplex 2.0/3.0 length more than 40M. and up to 100M.	29.00
	MM OM4 Duplex 2.0/3.0 length more than 100M.	30.00

FIBER OPTIC

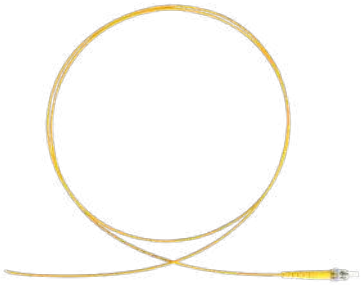
PIGTAIL/SINGLEMODE PIGTAIL



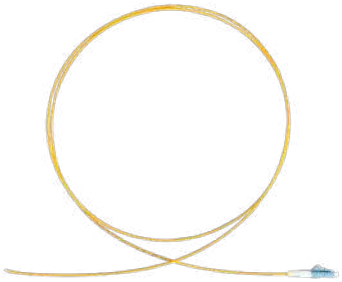
FC SM Pigtail



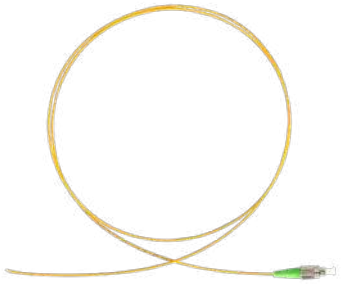
SC SM Pigtail



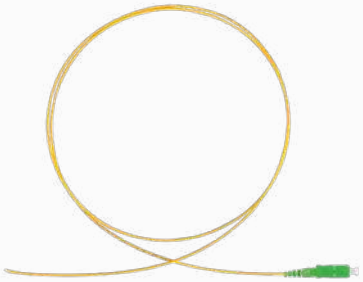
ST SM Pigtail



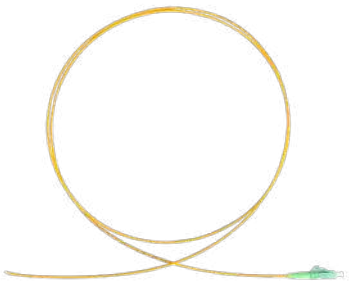
LC SM Pigtail



FCA SM Pigtail



SCA SM Pigtail



LCA SM Pigtail



SC G.657B3 SM Pigtail



SCA G.657B3 SM Pigtail

General Specifications :

Insertion Loss (dB)	≤0.2 typical (UPC) ≤0.3 typical (APC)
Return Loss (dB)	>50 (UPC) >60 (APC)
Operating Temperature (°C)	-40 to +75
Range Durability (dB)	<0.2 change after 500 matings
Core/Cladding (um)	9/125

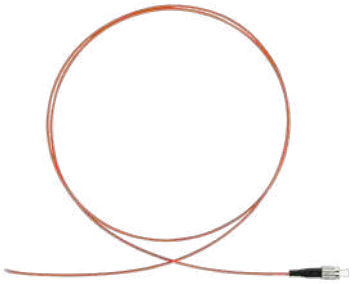
Order Informations :

Fiber Core	: G.652D, G.655, G.657A2, G.657B3
Cable Jacket	: PVC, LSZH*
Cable Color	: Yellow, Blue, Green, Red, Black
Cable Diameter (mm.)	: 0.9, 2.0, 2.4, 3.0, 3.5
Connector Boot	: Long, Short
Polishing Grade	: UPC, APC

* LSZH = Low Smoke Zero Halogen

FIBER OPTIC

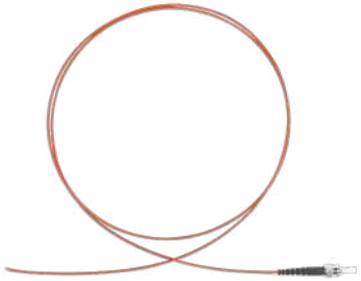
PIGTAIL/MULTIMODE PIGTAIL



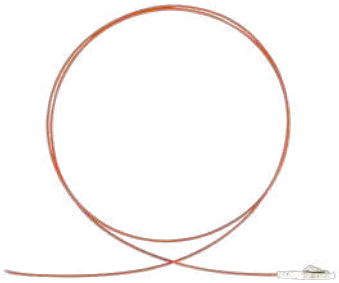
FC MM Pigtail



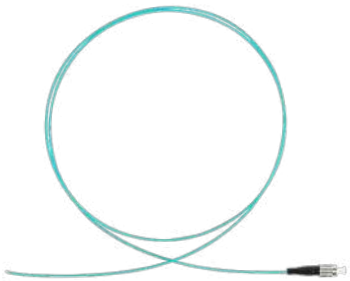
SC MM Pigtail



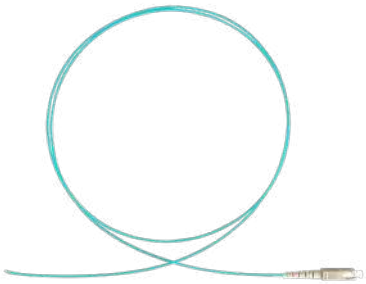
ST MM Pigtail



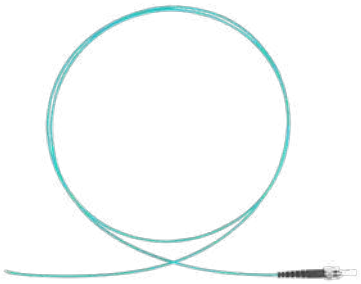
LC MM Pigtail



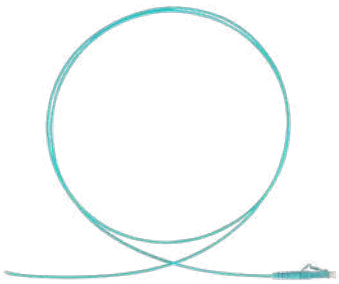
FC MM OM3/OM4 Pigtail



SC MM OM3/OM4 Pigtail



ST MM OM3/OM4 Pigtail



LC MM OM3/OM4 Pigtail

General Specifications :

Insertion Loss (dB)	≤0.3 typical
Operating Temperature (°C)	-40 to +75
Range Durability (dB)	<0.2 change after 500 matings
Polishing Grade	UPC

Order Informations :

Core/Cladding (um.)	: 50/125 for OM2/OM3/OM4, 62.5/125 for OM1
Cable Jacket	: PVC, LSZH*
Cable Color	: Orange for OM2, Aqua for OM3/OM4
Cable Diameter (mm.)	: 0.9, 2.0, 2.4, 3.0
Cable Type	: OM1, OM2, OM3, OM4
Connector Color	: Beige, Aqua for LC type
Connector Boot	: Long, Short

* LSZH = Low Smoke Zero Halogen

FIBER OPTIC

PIGTAIL/SINGLEMODE & MULTIMODE PIGTAIL

PART NO.	DESCRIPTIONS	PRICE
	Pigtail SM (X : Cable Diameter, X = 2 (2.0 mm), X = 3 (3.0 mm))	
PI1U5-XM1.5-0	FC Pigtail SM Simplex 1.5M.	30.-
PI2U5-XM1.5-0	SC Pigtail SM Simplex 1.5M.	25.-
PI3U5-XM1.5-0	ST Pigtail SM Simplex 1.5M.	30.-
PI4U5-XM1.5-0	LC Pigtail SM Simplex 1.5M.	25.-
PI1A5-XM1.5-0	FCA Pigtail SM Simplex 1.5M.	35.-
PI2A5-XM1.5-0	SCA Pigtail SM Simplex 1.5M.	20.-
PI4A5-XM1.5-0	LCA Pigtail SM Simplex 1.5M.	30.-
PI5U5-XM1.5-0	E2000 Pigtail SM Simplex 1.5M.	140.-
PI5A5-XM1.5-0	E2000A Pigtail SM Simplex 1.5M.	160.-
	Pigtail MM (X : Cable Diameter, X = 2 (2.0 mm), X = 3 (3.0 mm))	
PI1U3-XM1.5-0	FC Pigtail MM OM3 Simplex 1.5M.	60.-
PI2U3-XM1.5-0	SC Pigtail MM OM3 Simplex 1.5M.	60.-
PI3U3-XM1.5-0	ST Pigtail MM OM3 Simplex 1.5M.	60.-
PI4U3-XM1.5-0	LC Pigtail MM OM3 Simplex 1.5M.	60.-
PI1U4-XM1.5-0	FC Pigtail MM OM4 Simplex 1.5M.	70.-
PI2U4-XM1.5-0	SC Pigtail MM OM4 Simplex 1.5M.	70.-
PI3U4-XM1.5-0	ST Pigtail MM OM4 Simplex 1.5M.	70.-
PI4U4-XM1.5-0	LC Pigtail MM OM4 Simplex 1.5M.	70.-

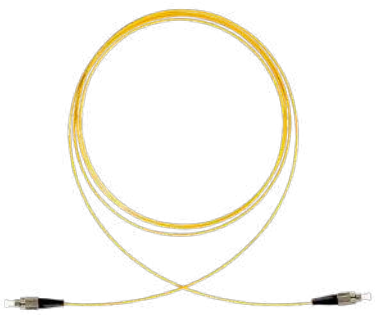
TIP

ความแตกต่างระหว่าง Fiber Patch Cord และ Fiber Pigtail

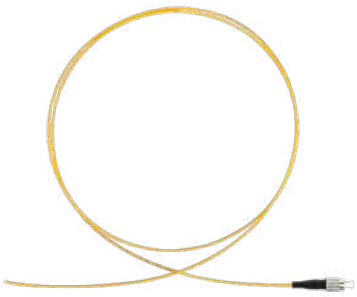
1.สำหรับสาย Fiber Pigtail จะเป็นสาย Fiber ที่มี connector อยู่ด้านเดียว ส่วนอีกด้านหนึ่งจะเป็นสาย Fiber ที่ไม่มี connector แต่สาย Fiber Patch Cord จะเป็นสาย Fiber ที่มี connector อยู่ทั้งสองด้าน

2.สำหรับวิธีการเชื่อมต่อสาย Fiber นั้น สาย Fiber Pigtail จะใช้วิธีการเชื่อมต่อเข้ากับสาย Fiber เส้นอื่น โดยวิธีการ Splice ซึ่งจะนำเอาด้านที่ไม่มี connector ของสายทั้งสองเส้น ไปทำการเชื่อมเข้าด้วยกันด้วยเครื่อง Splice ส่วนสาย Fiber Patch Cord จะใช้ connector ในการเชื่อมสาย Fiber เข้าด้วยกัน โดยสาย Fiber แต่ละเส้นจะต่อ connector เข้ากับตัว Adapter ในแต่ละด้าน

3.สำหรับรูปแบบในการใช้งาน สาย Fiber Pigtail หากทำการเชื่อมต่อสายโดยวิธีการ Splice เรียบร้อยแล้ว จะใช้อุปกรณ์ Sleeve เพื่อหุ้มป้องกันจุดต่อ แล้วนำไปจัดวางลงไปในถาด Splice Tray พร้อมทั้งจัดสายให้เรียบร้อย ส่วนสาย Fiber Patch Cord จะต่อ connector บนแผง Snap Plate ของอุปกรณ์ ODF ซึ่งบนแผง Snap Plate จะมีตัว Adapter เพื่อใช้ต่อ connector สาย Fiber เข้าด้วยกันโดยตัว Adapter ที่ใช้มีหลายแบบ ดังนั้นจะต้องเลือก connector บนสาย Fiber Patch Cord ให้ตรงกับตัว Adapter ที่มีอยู่แผง Snap Plate เพื่อให้สามารถต่อเข้ากันได้



Patch Cord



Pigtail

FIBER OPTIC

LOOP BACK



SC MM Loop Back



LC MM Loop Back



MPO MM OM3 Loop Back



MPO MM OM4 Loop Back

General Specifications :

Insertion Loss (dB)	≤0.30 typical (UPC) for SM ≤0.50 typical for MM
Return Loss (dB)	>50 (UPC)
Operating Temperature (°C)	-40 to +75
Range Durability (dB)	<0.2 change after 500 matings

Order Informations :

Core/Cladding (µm.)	: 9/125 for SM 50/125, 62.5/125 for MM
Cable Diameter (mm.)	: 2.0, 3.0
Loop Back Type	: SM OS2 MM OM1, OM2, OM3, OM4

PART NO.	DESCRIPTIONS	PRICE
	Loop Back	
LB2U2-1-1	SC MM Loop Back	280.-
LB4U2-1-1	LC MM Loop Back	250.-
LB2U5-1-1	SC SM Loop Back	230.-
LB4U5-1-1	LC SM Loop Back	240.-
LB8U3-12-1	MPO 12F MM OM3 Loop Back Male	950.-
LB8U3-12-2	MPO 12F MM OM3 Loop Back Female	700.-
LB8U3-24-1	MPO 24F MM OM3 Loop Back Male	Call
LB8U3-24-2	MPO 24F MM OM3 Loop Back Female	Call
LB8U4-12-1	MPO 12F MM OM4 Loop Back Male	1,000.-
LB8U4-12-2	MPO 12F MM OM4 Loop Back Female	750
LB8U4-24-1	MPO 24F MM OM4 Loop Back Male	Call
LB8U4-24-2	MPO 24F MM OM4 Loop Back Female	Call
LB9U3-12-1	MTP 12F MM OM3 Loop Back Male	1,430.-
LB9U3-12-2	MTP 12F MM OM3 Loop Back Female	1,155.-
LB9U3-24-1	MTP 24F MM OM3 Loop Back Male	Call
LB9U3-24-2	MTP 24F MM OM3 Loop Back Female	Call
LB9U4-12-1	MTP 12F MM OM4 Loop Back Male	Call
LB9U4-12-2	MTP 12F MM OM4 Loop Back Female	Call
LB9U4-24-1	MTP 24F MM OM4 Loop Back Male	Call
LB9U4-24-2	MTP 24F MM OM4 Loop Back Female	Call

FIBER OPTIC

DISTRIBUTION FRAME/RACK MOUNT



ODF Rack 1U 18-36F
3 Mini-Snap Plate
(Slide w/o Drawer)
P/N : ODFRO3S1U



ODF Rack 1U 12-24F
2 Snap Plate
(Slide w/o Drawer)
P/N : ODFRO2S1U



ODF Rack 1U 12-24F
2 Snap Plate
(Slide with Drawer)
P/N : ODFRDS1U



ODF Rack 2U 24-48F
4 Snap Plate
(Slide with Drawer)
P/N : ODFRDS2U



ODF Rack 3U 48-96F
8 Snap Plate
(Slide with Drawer)
P/N : ODFRDS3U



ODF Rack 4U 60-120F
10 Snap Plate
(Slide with Drawer)
P/N : ODFRDS4U



ODF Rack 2U 48-144F
(Swing)
P/N : ODFRSS2U

Applications :

- Indoor application
- Interface optical communication system
- Telecommunication networks, data communication networks and FTTx

General Specifications :

- Powder coated steel cabinet
- Suitable for 19"/21" standard rack
- Combine splicing function, store of fiber optical cable, pigtail and patch cord
- Store and protect excess optical cable and patch cord
- Fit with 12-24 fiber splicing tray
- Suitable for FC/SC/ST/LC/E2000/MPO adapter
- Nice shape, easy installment and maintenance
- Option for aluminium cabinet

FIBER OPTIC

DISTRIBUTION FRAME/WALL MOUNT INDOOR



ODF Wall Indoor 12-24F
P/N : ODFWIS24U



ODF Wall Indoor 24-48F
P/N : ODFWIS48U



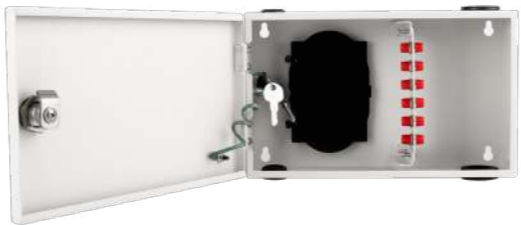
ODF Wall Indoor 48-60F
P/N : ODFWIS60U



ODF Wall Indoor 120-168F
P/N : ODFWIS168U

Applications :

- Indoor application
- Interface optical communication system
- Telecommunication networks, data communication networks and FTTx



ODF Wall Indoor MINI 6-12F
P/N : ODFWIS12U

General Specifications :

- Powder coated steel cabinet
- Suitable for mounting on the wall
- Combine splicing function, store of fiber optical cable, pigtail and Patch Cord
- Store and protect excess optical cable and patch cord
- Fit with 12-24 fiber splicing tray
- Suitable for FC/SC/ST/LC/E2000/MPO adapter
- Nice shape, easy installment and maintenance
- Option for aluminium cabinet

FIBER OPTIC

DISTRIBUTION FRAME/WALL MOUNT OUTDOOR



ODF Wall Outdoor Steel 12-24F
P/N : ODFWOS24U



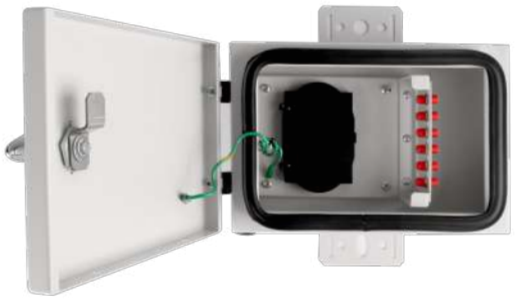
ODF Wall Outdoor 12-24F
P/N : ODFWOA24U



ODF Wall Outdoor 48-60F
P/N : ODFWOA60U



ODF Wall Outdoor 96-144F
P/N : ODFWOA144U



ODF Wall Outdoor MINI Steel 6-12F
P/N : ODFWOS12U

Applications :

- Outdoor application
- Interface optical communication system
- Telecommunication networks, data communication networks and FTTx

General Specifications :

- Powder coated aluminum cabinet
- Suitable for mounting on the wall/pole
- Combine splicing function, store of fiber optical cable, pigtail and patch cord
- Store and protect excess optical cable and patch cord
- Fit with 12-24 fiber splicing tray
- Suitable for FC/SC/ST/LC/E2000/MPO adapter
- Nice shape, easy installment and maintenance
- Option for steel cabinet

FIBER OPTIC

DISTRIBUTION FRAME/SNAP PLATE



6 FC SM



12 FC SM



Oblique 6 FC SM



6 ST SM



12 ST SM



6 SC SM



6 SC MM



6 SCA SM



Oblique 6 SC SM



Oblique 6 SC MM



Oblique 6 SCA SM



12 SC SM



12 SC MM



12 SCA SM



6 SC Duplex SM



6 SC Duplex MM



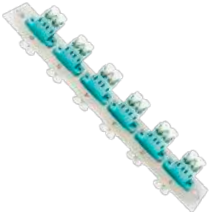
6 SCA Duplex SM



6 LC Duplex SM



6 LC Duplex MM



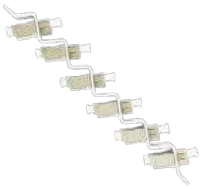
6 LC Duplex MM Aqua

FIBER OPTIC

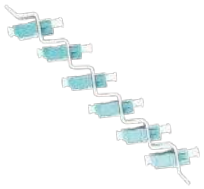
DISTRIBUTION FRAME/SNAP PLATE



Oblique 6 LC Duplex SM



Oblique 6 LC Duplex MM



Oblique 6 LC Duplex MM Aqua



12 LC Duplex SM



12 LC Duplex MM



12 LC Duplex MM Aqua



6 E2000 SM



6 E2000A SM



6 FCA SM



6 MPO

Blank Plate



24 LC Simplex SM



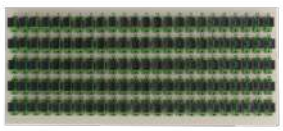
24 FC SM



48 FC SM



48 LC Duplex SM



120 SCA SM



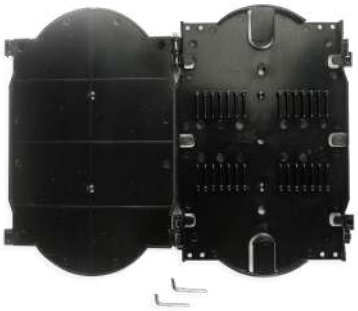
120 LC Simplex SM

FIBER OPTIC

DISTRIBUTION FRAME/ACCESSORIES



Mini Splice Tray 12 Fibers



Splice Tray 12 Fibers



Splice Tray 24 Fibers



Splice Tray
with Cable Management



Cable Management



Water Proof Connector



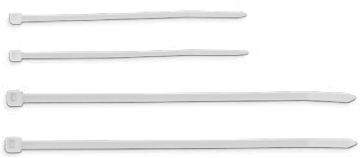
Fusion Sleeve 40 mm./60 mm.



Cage Nut Set



Swell Bolt



Cable Tie

FIBER OPTIC

DISTRIBUTION FRAME

PART NO.	DESCRIPTIONS	PRICE
	Rack Mount Type	
ODFRO3S1U	ODF Rack 1U 18-36F, Slide without Drawer 3 Snap Plate (Unload)	1,010.-
ODFRO2S1U	ODF Rack 1U 12-24F, Slide without Drawer 2 Snap Plate (Unload)	1,010.-
ODFRDS1U	ODF Rack 1U 12-24F, Slide Drawer with Front Cover (Unload)	1,200.-
ODFRDS2U	ODF Rack 2U 24-48F, Slide Drawer with Front Cover (Unload)	2,310.-
ODFRDS3U	ODF Rack 3U 48-96F, Slide Drawer with Front Cover (Unload)	3,025.-
ODFRDS4U	ODF Rack 4U 60-120F, Slide Drawer with Front Cover (Unload)	4,125.-
ODFRDS5U	ODF Rack 5U 84-168F, Slide Drawer with Front Cover (Unload)	4,730.-
ODFRDS6U	ODF Rack 6U 96-288F, Slide Drawer with Front Cover (Unload)	6,050.-
ODFRSS2U	ODF Rack 2U 48-144F, Swing Type with Front Cover (Unload)	2,420.-
	Wall Mount Indoor Type	
ODFWIS24U	ODF Wall Indoor 12-24F (Unload)	957.-
ODFWIS48U	ODF Wall Indoor 24-48F (Unload)	1,727.-
ODFWIS96U	ODF Wall Indoor 48-96F (Unload)	4,015.-
ODFWIS168U	ODF Wall Indoor 120-168F (Unload)	6,743.-
ODFWIS12U	ODF Wall Indoor MINI 6-12F (Unload)	880.-
	Wall Mount Outdoor Type	
ODFWOS24U	ODF Wall Outdoor Steel 12-24F (Unload)	2,970.-
ODFWOA24U	ODF Wall Outdoor AL12-24F (Unload)	3,311.-
ODFWOA60U	ODF Wall Outdoor AL 48-60F (Unload)	4,389.-
ODFWOA144U	ODF Wall Outdoor AL96-144F (Unload)	5,313.-
ODFWOS12U	ODF Wall Outdoor MINI Steel 6-12F (Unload)	1,386.-
	Accessories	
SPT0	Mini Splice Tray 12 Fibers	60.-
SPT1	Splice Tray 12 Fibers	75.-
SPT2	Splice Tray 24 Fibers	85.-
SPT3	Splice Tray 12 Fibers with Cable Management for Adapter FC/SC/LC	Call
CM-01P	Cable Management	10.-
PG-XX	Water Proof Connector PG11/PG16	12.-/18.-
FS-XX	Fusion Sleeve, 40mm./60mm.	3.-
CN-M6	Cage Nut Set, M6	7.-/SET
SB-1-4	Swell Bolt 1/4"	Call
CT-XXX	Cable Tie 4", 6"	Call

FIBER OPTIC

TOOL



Kevlar Scissors Type I



Kevlar Scissors Type II



FTTH Drop Cable Stripper



Fiber Optical Stripper



Lint-free Fiber Wipe Paper



Alcohol Bottle



Visual Laser
Malfunction Detector



FC/SC/LC and MPO
Cleaner Pen

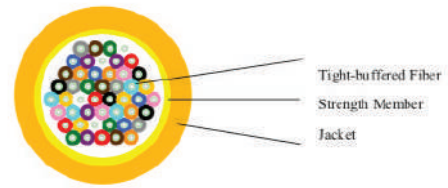


Fiber Cleaner Cassette Type

ITEM	DESCRIPTIONS	PRICE
1	Kevlar Scissors Type I	2,200.-
2	Kevlar Scissors Type II	600.-
3	FTTH Drop Cable Stripper	600.-
4	Fiber Optical Stripper	620.-
5	Lint-free Fiber Wipe Paper	160.-
6	Alcohol Bottle	350.-
7	Visual Laser Malfunction Detector 5/10/20/30 Km.	Call
8	FC/SC/LC Cleaner Pen	700.-
9	MPO Cleaner Pen	1,500.-
10	Fiber Cleaner Cassette Type	900.-

Tight Buffer Distribution Cable

Structure & Capability



Tight Buffer Distribution cable

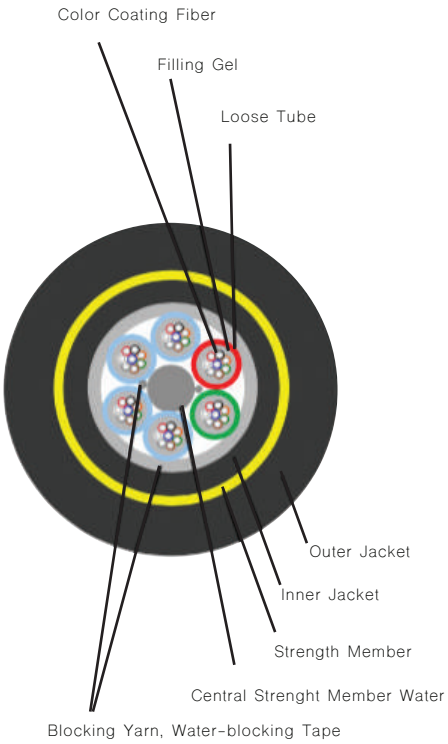
PARAMETER								
Fiber Count	4	6	8	12	16	24	36	48
Cable Dimension (mm.)	5	5.2	5.5	6.5	7.5	8.2	9.0	10.5
Cable Weight (kg)	19.0	23.0	26.0	36.5	44.5	54.5	72.0	90.0
Bending Radius (mm.)	Static : 10 times of cable diameter Dynamic : 20 times of cable diameter							
STRUCTURE								
Description	Tight-buffered Fiber, Strength Member, Jacket							
Fiber	SM : G652D, G655, G657 or other singlemode optical fiber MM : OM2, OM3, OM4 or other multimode fiber							
Strength Member	Aramid yarn or other high strength yarn							
Jacket	Materials : low smoke zero halogen (LSZH) Color : color as specified by standard or other color							
FEATURES								
Application	Used in indoor cabling Used as connection cable between buildings							
Temperature	-20°C ~ +60°C							

ITEM	DESCRIPTIONS	PRICE
	Singlemode 9/125 Indoor Cable	
1	Tight Buffer Distribution Cable 6 Cores, Singlemode	16.-/M
2	Tight Buffer Distribution Cable 12 Cores, Singlemode	27.-/M
3	Tight Buffer Distribution Cable 24 Cores, Singlemode	Call
4	Tight Buffer Distribution Cable 48 Cores, Singlemode	Call
	Multimode OM3 50/125 Indoor Cable	
5	Tight Buffer Distribution Cable 6 Cores, Multimode OM3	28.-/M
6	Tight Buffer Distribution Cable 12 Cores, Multimode OM3	50.-/M
7	Tight Buffer Distribution Cable 24 Cores, Multimode OM3	Call
8	Tight Buffer Distribution Cable 48 Cores, Multimode OM3	Call
	Multimode OM4 50/125 Indoor Cable	
9	Tight Buffer Distribution Cable 6 Cores, Multimode OM4	50.-/M
10	Tight Buffer Distribution Cable 12 Cores, Multimode OM4	86.-/M
11	Tight Buffer Distribution Cable 24 Cores, Multimode OM4	Call
12	Tight Buffer Distribution Cable 48 Cores, Multimode OM4	Call

FIBER OPTIC

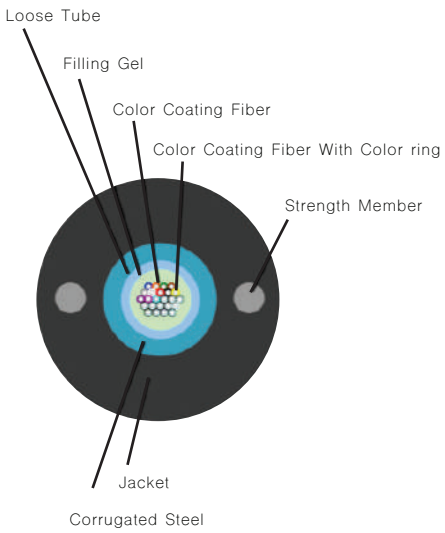
OUTDOOR CABLE

All Dielectric Self-supporting Aerial Cable Structure & Capability



PARAMETER							
Fiber Count	1-36	36-72	72-96	96-144	1-24	1-24	1-24	1-24
Cable Dimension (mm.)	11.2	11.8	13.2	15.9	11.3	11.5	11.7	11.9
Bending Radius (mm.)	Static : 10 times of cable diameter Dynamic : 20 times of cable diameter							
STRUCTURE								
Description	ADSS cable is being designed suitable for different grade overhead power line polyethylene (PE)							
Fiber	SM : G652D, G655, G657 or other singlemode optical fiber MM : OM2, OM3, OM4 or other multimode fiber							
Jacket	Materials: electrical indentation (ATT), flame retardant polyethylene (ZRPE) Color : black or other color							
FEATURES								
Application	Suitable for non-self-supporting aerial of power line							
Characteristic	Can be installed without shutting off the power, good AT performance, good electocorrosion performance. Light weight and small diameter reducing the load caused by ice and wind and the load on tower and back props							
Temperature	-40°C ~ +60°C							

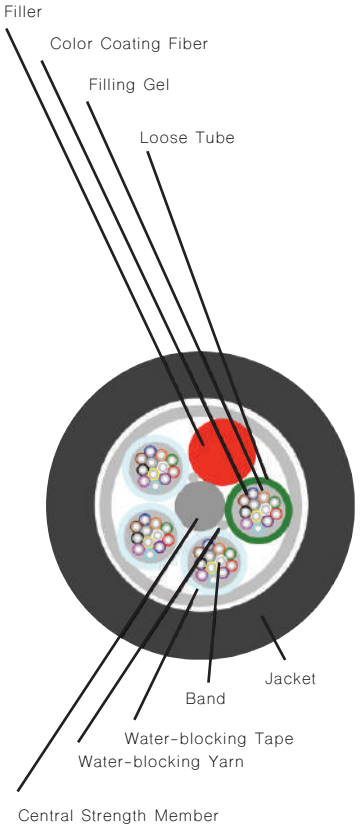
Uni-tube Steel-armored Outdoor Cable Structure & Capability



PARAMETER			
Fiber Count	2-12	16	24
Cable Dimension (mm.)	8	9	10
Weight (kg)	55	70	85
Bending Radius (mm.)	Static : 10 times of cable diameter Dynamic : 20 times of cable diameter		
STRUCTURE			
Description	Loose tube made of color coating fibers and filled with waterproof compounds Two parallel metal strength members embedded in the jacket		
Fiber	SM : G652D, G655, G657 or other singlemode optical fiber MM : OM2, OM3, OM4 or other multimode fiber		
Jacket	Materials : polyethylene (PE), flame-retardant polyethylene (ZRPE) or other materials Color : black or other color		
FEATURES			
Application	Suitable to direct bury, Suitable for duct. Non-self-supporting aerial		
Characteristic	Good mechanical and environmental performance. High strength loose tube that is hydrolysis resistant. Crush resistance and moisture barrier Small structure, light weight, good tensile performance		
Temperature	-40°C~+70°C		

FIBER OPTIC

OUTDOOR CABLE



Stranded Loose Tube Outdoor Cable

Structure & Capability

PARAMETER				
Fiber Count	2-60	72	96	144
Cable Dimension (mm.)	9.3	10.3	11.0	13.5
Weight (kg)	73	94	102	158
Bending Radius (mm.)	Static : 10 times of cable diameter Dynamic : 20 times of cable diameter			

STRUCTURE	
Description	Loose tube made of color coating fibers and filled with waterproof compounds. Loose tube are stranded around the strength member which in the central of cable into cable core
Fiber	SM : G652D, G655, G657 or other singlemode optical fiber MM : OM2, OM3, OM4 or other multimode fiber
Jacket	Materials : polyethylene (PE), low smoke halogen-free flame retardant polyolefin (LSZH), flame-retardant polyethylene (ZRPE) or other material Color : black or other color

FEATURES	
Application	Can be used in duct, Non-self-supporting aerial
Characteristic	Good mechanical and environmental performance High strength loose tube that is hydrolysis resistant All-dielectric structure has strong ability to resist electromagnetic interference Small structure, light weight, easy to lay, saving precious duct resources
Temperature	-40°C~+70°C

ITEM	DESCRIPTIONS	PRICE
	ADSS Singlemode 9/125 Outdoor Cable	
1	All Dielectric Self Supporting Aerial Cable 24 Cores, Singlemode	30.-/M
2	All Dielectric Self Supporting Aerial Cable 36 Cores, Singlemode	40.-/M
3	All Dielectric Self Supporting Aerial Cable 48 Cores, Singlemode	45.-/M
4	All Dielectric Self Supporting Aerial Cable 60 Cores, Singlemode	52.-/M
	Uni-tube Steel Armored Singlemode 9/125 Outdoor Cable	
5	Uni-tube Steel Armored Outdoor Cable 12 Cores, Singlemode	21.-/M
6	Uni-tube Steel Armored Outdoor Cable 24 Cores, Singlemode	35.-/M
	Stranded Loose Tube Singlemode 9/125 Outdoor Cable	
7	Stranded Loose Tube Outdoor Cable 60 Cores, Singlemode	Call
8	Stranded Loose Tube Outdoor Cable 72 Cores, Singlemode	Call
9	Stranded Loose Tube Outdoor Cable 96 Cores, Singlemode	Call
10	Stranded Loose Tube Outdoor Cable 144 Cores, Singlemode	Call

FIBER OPTIC

CLOSURE

In-Line Closure Horizontal, Screw Type



CL-H120-01 120F

Applications :

- Aerial, Wall-mounting, Pole-mounting, Hand hole-mounting and Underground

Features :

- The body is made of high quality engineering plastic with good strength
- With good waterproof design, the fiber optical splice closure can be applied into underground and aerial
- Be equipped with 5 splice trays (each capacity is 24 cores)
- Excellent fiber routing design ensures the radius curvature of the fiber well and enough fiber storage space

In-Line Closure Vertical (Dome)



CL-D048-02 48F

Applications :

- Aerial, Wall-mounting, Pole-mounting, Hand hole-mounting and Underground

Features :

- The body is made of high quality engineering plastic with good strength
- With good waterproof design, the fiber optical splice closure can be applied into underground and aerial
- Be equipped with 4 splice trays (each capacity is 12 cores)
- Excellent fiber routing design ensures the radius curvature of the fiber well and enough fiber storage space

In-Line Closure Horizontal, Snap Lock Type



CL-2022-F 72F

Applications :

- Aerial, Wall-mounting and Pole-mounting

Features :

- The product is made of high quality impact resistant plastic and has a standard user interface that can be re-opened
- Anti-ultraviolet, anti-impact and waterproof function
- Unique flip board, flip angle ≥ 180°, fusion area and distribution area is more obvious, reducing the cable crossing
- Fiber optic cable can go in and out of the box without cut the cable



CL-9417 120F

Applications :

- Aerial, Wall-mounting, Pole-mounting, Hand hole-mounting and Underground

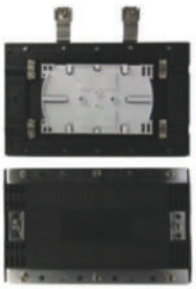
Features :

- Hinge structure, watertight and no screw design, open easily and user friendly
- Material made of PP+GF
- Mechanical seal type, sealed by buckles
- Support maximum 120F
- Support splice tray 24F, maximum 5 pcs
- Inlet 3 ports and outlet 3 ports
- Meet protection grade IP68

FIBER OPTIC

CLOSURE

Drop Closure, Screw Type





CL-010 12F

Applications :

- Telecommunication subscriber loop
- Fiber to the home (FTTH)
- LAN/WAN

Features :

- Suitable for straight through, diverging and connection of FTTX FTTB passive network
- Use material of high-strength PP+GF plastics + stainless steel parts
- Corrosion resistant, aging resistant
- Trays can be increased and reduced according to the application
- Good properties of dust and moisture proofing

PART NO.	DESCRIPTIONS	PRICE
	Closure	
CL-H120-01-60	In-Line Closure, Horizontal 60F, Screw Type	1,475.-
CL-H120-01-72	In-Line Closure, Horizontal 72F, Screw Type	1,490.-
CL-H120-01-96	In-Line Closure, Horizontal 96F, Screw Type	1,550.-
CL-H120-01-120	In-Line Closure, Horizontal 120F, Screw Type	1,600.-
CL-D048-02-12	In-Line Closure, Vertical 12F (Dome)	1,900.-
CL-D048-02-24	In-Line Closure, Vertical 24F (Dome)	2,000.-
CL-D048-02-48	In-Line Closure, Vertical 48F (Dome)	2,200.-
CL-2022-F-12	In-Line Closure, Horizontal 12F, Snap Lock Type	1,000.-
CL-2022-F-24	In-Line Closure, Horizontal 24F, Snap Lock Type	1,050.-
CL-2022-F-48	In-Line Closure, Horizontal 48F, Snap Lock Type	1,100.-
CL-2022-F-60	In-Line Closure, Horizontal 60F, Snap Lock Type	1,150.-
CL-9417-60	In-Line Closure, Horizontal 60F, Snap Lock Type	1,400.-
CL-9417-72	In-Line Closure, Horizontal 72F, Snap Lock Type	1,420.-
CL-9417-96	In-Line Closure, Horizontal 96F, Snap Lock Type	1,500-
CL-9417-120	In-Line Closure, Horizontal 120F, Snap Lock Type	1,550.-
CL-010-12	Drop Closure 12F, Screw Type	500.-
CL-020-12	Drop Closure 12F, Snap Lock Type	900.-

FIBER OPTIC

FIXED ATTENUATOR



FC Attenuator



SC Attenuator



LC Attenuator



SCA Attenuator

General Specifications :

Operating Wavelength (nm)	1310 and/or 1550 (For Singlemode) 850 (For Multimode)
Attenuation Value (dB)	5,10,15,20 or customized
Attenuation Accuracy (dB)	± 5 to 10%
Operating Temperature (°C)	-40 to +75

PART NO.	DESCRIPTIONS	PRICE
	FC Attenuator	
AT1US5	FC Attenuator 5dB SM	180.-
AT1US10	FC Attenuator 10dB SM	180.-
AT1US15	FC Attenuator 15dB SM	180.-
	SC Attenuator	
AT2US5	SC Attenuator 5dB SM	200.-
AT2US10	SC Attenuator 10dB SM	200.-
AT2US15	SC Attenuator 15dB SM	200.-
	LC Attenuator	
AT4US5	LC Attenuator 5dB SM	160.-
AT4US10	LC Attenuator 10dB SM	160.-
AT4US15	LC Attenuator 15dB SM	160.-
	ST Attenuator	
AT3US5	ST Attenuator 5dB SM	200.-
AT3US10	ST Attenuator 10dB SM	200.-
AT3US15	ST Attenuator 15dB SM	200.-
	SCA Attenuator	
AT2AS5	SCA Attenuator 5dB SM	200.-
AT2AS10	SCA Attenuator 10dB SM	200.-
AT2AS15	SCA Attenuator 15dB SM	200.-

FIBER OPTIC

OUTDOOR PATCH CORD - CPRI



Outdoor Patch Cord



Outdoor Patch Cord
with Breakout
Stainless Tube
and Pulling Eye



Outdoor Armored
Patch Cord
with Water
Proof Connector



Outdoor Patch Cord
with Breakout
Stainless Tube and
Water Proof Connector

General Specifications :

Insertion Loss (dB)	≤0.20 (SM) ≤0.30 (MM)
Return Loss (dB)	>50 (UPC) >60 (APC)
Operating Temperature (°C)	-40 to +75
Range Durability (dB)	<0.2 change after 500 matings
Connector Type	FC, SC, LC, ST, E2000 and MU
Capacity	2 to 12 cores

ITEM	DESCRIPTIONS	PRICE
1	Outdoor Patch Cord	Call
2	Outdoor Patch Cord with Breakout Stainless Tube and Pulling Eye	Call
3	Outdoor Armored Patch Cord with Water Proof Connector	Call
4	Outdoor Patch Cord with Breakout Stainless Tube and Water Proof Connector	Call
5	Outdoor Patch Cord with Special Water Proof Connector	Call



FIBER OPTIC

PLANAR LIGHTWAVE CIRCUIT (PLC) SPLITTER

Introductions

The singlemode Planar Light wave Circuit (PLC) Splitter is developed based on unique quartz glass waveguide and processes with reliable precision aligned fiber pigtail in a miniature package. It provides a low cost light distribution solution with small form factor and high reliability. The PLC has the high performance in terms of low insertion loss, low PDL, high return loss and excellent uniformity over a wide wavelength range from 1260nm to 1620nm and working in temperature from -40°C to +85°C. PLC has standard configurations of 1x2, 1x4, 1x8, 1x16 and 1x32 configurations, as well as customized structure of 2x16, 2x32 and so on.

Applications :

- FTTx system
- LAN, WAN and metro network
- Analog/Digital passive optical network
- CATV network
- Other applications in fiber optic system

Features :

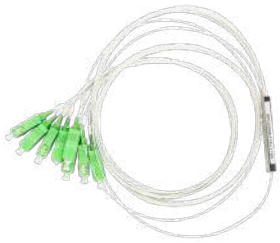
- Compact design
- Low insertion loss and low PDL
- High reliability
- High channel counts
- Wide wavelength range
- Wide operating temperature range
- Customized packaging and configuration

Reliability :

- Telcordia GR-1209-CORE
- Telcordia GR-1221-CORE



Splitter PLC 1:2 SM Blockless
without Connector



Splitter PLC 1:8 SM Blockless
with SCA Connector



Splitter PLC 1:8 SM ABS
with SCA Connector



Splitter PLC 1:8 SM Cassette
with SCA Adapter



Splitter PLC 1:16 SM Cassette
with SCA Adapter



Splitter PLC 1:32 SM Cassette
with SCA Adapter

FIBER OPTIC

PLANAR LIGHTWAVE CIRCUIT (PLC) SPLITTER

Specifications :

PORT CONFIGURATION	UNIT	1x2	1x4	2x4	1x8	2x8	1x16	2x16	1x32	2x32	1x64
Operating Wavelength	nm	1260~1650									
Fiber Type		G652D or G657A2									
Insertion Loss (dB)	dB	≤4.3	≤7.2	≤7.5	≤10.5	≤11.2	≤13.6	≤14.6	≤17.0	≤17.5	≤21
Loss Uniformity	dB	≤0.5	≤0.6	≤1.2	≤0.8	≤1.5	≤1.4	≤2.0	≤1.6	≤2.5	≤2.5
PDL	dB	<0.2	<0.3								≤0.5
Directivity	dB	>55									
Return Loss	dB	>55									
Operation Temperature (°C)	°C	-40~+85									
StorageTemperature	°C	-40~+85									
Blockless 0.25mm. Fiber Package Size (LxWxH)	mm	40x4.0x4.0	40x4.0x4.0	50x4.5x4.0	40x4.0x4.0	50x4.5x4.0	45x4.5x4.0	60x7.0x4.0	50x7.0x4.0	60x7.0x4.0	60x12x4.0
Blockless 0.9mm. Fiber Package Size (LxWxH)	mm	50x7.0x4.0	60x7.0x4.0	60x7.0x4.0	60x7.0x4.0	60x7.0x4.0	60x12x4.0	60x12x4.0	80x20x6.0	80x20x6.0	100x40x6.0
ABS 2.0mm. Fiber Package Size (LxWxH)	mm	90x20x10	100x80x10	100x80x10	100x80x10	100x80x10	120x80x18	120x80x18	120x80x18	120x80x18	140x115x18
Cassette Package Size (LxWxH)	mm	130x100x25	130x100x25	130x100x25	130x100x25	130x100x25	130x100x50	130x100x50	130x100x102	130x100x102	130x100x206

Ordering Information :

	PORT CONFIGURATION	SPLITTER RATIO	CONNECTOR	FIBER TYPE	-	PIGTAIL TYPE - IN/OUT	PIGTAIL LENGTH - IN/OUT
SPPB = BLOCKLESS TYPE SPPA = ABS TYPE SPPC = CASSETTE TYPE	12 = 1x2 14 = 1x4 18 = 1x8 1S = 1x16 1T = 1x32 1U = 1x64 24 = 2x4 28 = 2x8 2S = 2x16 2T = 2x32	0 = equal-ratio	0 = none 1A = FC/APC 1U = FC/UPC 2A = SC/APC 2U = SC/UPC 3U = ST 4U = LC/UPC 4A = LC/APC 8U = MPO	5 = G652D 6 = G657A2	-	0 = 0.25mm. 1 = 0.9mm. 2 = 2.0mm. 3 = 3.0mm.	M1/M1 = IN1.0M/OUT1.0M M1.5/M1.5 = IN1.5M/OUT1.5M M2/M2 = IN2.0M/OUT2.0M

FIBER OPTIC

PLANAR LIGHTWAVE CIRCUIT (PLC) SPLITTER

PART NO.	DESCRIPTIONS	PRICE
	Splitter PLC Blockless	
SPPB12-0-0N5-0.9M1M1	Splitter PLC 1:2 SM Blockless without Connector, 1M.	210.-
SPPB12-0-2A5-0.9M1M1	Splitter PLC 1:2 SM Blockless with SCA Connector, 1M.	305.-
SPPB14-0-0N5-0.9M1M1	Splitter PLC 1:4 SM Blockless without Connector, 1M.	215.-
SPPB14-0-2A5-0.9M1M1	Splitter PLC 1:4 SM Blockless with SCA Connector, 1M.	370.-
SPPB18-0-0N5-0.9M1M1	Splitter PLC 1:8 SM Blockless without Connector, 1M.	225.-
SPPB18-0-2A5-0.9M1M1	Splitter PLC 1:8 SM Blockless with SCA Connector, 1M.	515.-
SPPB1S-0-0N5-0.9M1M1	Splitter PLC 1:16 SM Blockless without Connector, 1M.	370.-
SPPB1S-0-2A5-0.9M1M1	Splitter PLC 1:16 SM Blockless with SCA Connector, 1M.	915.-
SPPB1T-0-0N5-0.9M1M1	Splitter PLC 1:32 SM Blockless without Connector, 1M.	750.-
SPPB1T-0-2A5-0.9M1M1	Splitter PLC 1:32 SM Blockless with SCA Connector, 1M.	1,800.-
	Splitter PLC ABS	
SPPA12-0-2A5-2M1M1	Splitter PLC 1:2 SM ABS with SCA Connector, 1M.	345.-
SPPA14-0-2A5-2M1M1	Splitter PLC 1:4 SM ABS with SCA Connector, 1M.	410.-
SPPA18-0-2A5-2M1M1	Splitter PLC 1:8 SM ABS with SCA Connector, 1M.	605.-
SPPA1S-0-2A5-2M1M1	Splitter PLC 1:16 SM ABS with SCA Connector, 1M.	1,065.-
SPPA1T-0-2A5-2M1M1	Splitter PLC 1:32 SM ABS with SCA Connector, 1M.	2,060.-
SPPA24-0-2A5-2M1M1	Splitter PLC 2:4 SM ABS with SCA Connector, 1M.	Call
SPPA28-0-2A5-2M1M1	Splitter PLC 2:8 SM ABS with SCA Connector, 1M.	Call
SPPA2S-0-2A5-2M1M1	Splitter PLC 2:16 SM ABS with SCA Connector, 1M.	Call
SPPA2T-0-2A5-2M1M1	Splitter PLC 2:32 SM ABS with SCA Connector, 1M.	Call
	Splitter PLC Cassette	
SPPC12-0-2A5	Splitter PLC 1:2 SM Cassette with SCA Adapter	285.-
SPPC14-0-2A5	Splitter PLC 1:4 SM Cassette with SCA Adapter	330.-
SPPC18-0-2A5	Splitter PLC 1:8 SM Cassette with SCA Adapter	450.-
SPPC1S-0-2A5	Splitter PLC 1:16 SM Cassette with SCA Adapter	715.-
SPPC1T-0-2A5	Splitter PLC 1:32 SM Cassette with SCA Adapter	1,400.-
SPPC1U-0-2A5	Splitter PLC 1:64 SM Cassette with SCA Adapter	3,200.-

FIBER OPTIC

MEDIA CONVERTER



Dual Fiber, External Power Supply

General Specifications :

Singlemode

Ethernet Connection	10/100 or 10/100/1000Base-T
Wavelength (nm)	1310 nm, 1550 nm
Distance Range	10 km. - 120 km.
Connector Type	SC Connector / ST Connector

Multimode

Ethernet Connection	10/100 or 10/100/1000Base-T
Wavelength (nm)	850 nm, 1310 nm
Distance Range	550 m. - 2 km.
Connector Type	SC Connector / ST Connector



Single Fiber,
External Power Supply

General Specifications :

Singlemode

Ethernet Connection	10/100 or 10/100/1000Base-T
Wavelength (nm)	1310 nm, 1550 nm
SFP Type	1.25G
Distance Range	10 km. - 120 km.
Connector Type	LC Connector



SFP Fiber Interface,
External Power Supply

Multimode

Ethernet Connection	10/100 or 10/100/1000Base-T
Wavelength (nm)	850 nm, 1310 nm
SFP Type	1.25G
Distance Range	550 m. - 2 km.
Connector Type	LC Connector



Fiber Media
Converter Rack Mount

General Specifications :

Power & Physical Slot

- Suitable for 19" Rack Mount
- 16 Slot Media Converter Card
- Dual Power Supply Module
- AC 220 VAC / 50 Hz
- 48Vdc Option

Ethernet Connection

- 10/100 or 10/100/1000Base-T

Singlemode

Wavelength (nm)	1310 nm, 1550 nm
Distance Range	10 km. - 120 km.
Connector Type	SC Connector / ST Connector

Multimode

Wavelength (nm)	850 nm, 1310 nm
Distance Range	550 m. - 2 km.
Connector Type	SC Connector / ST Connector

FIBER OPTIC

SFP TRANSCEIVER AND PoE

SFP Transceiver



1.25Gb/s BiDi SFP Transceiver
Simplex LC, Singlemode, DDM



1.25Gb/s Duplex LC, Singlemode



10Gb/s SFP+ Transceiver
Duplex LC, Singlemode



40Gb/s QSFP+ PSM Transceiver
MPO Connector, Singlemode

General Specifications :

- Up to 1.25Gb/s for SFP Transceiver
- Up to 10Gb/s for SFP+ Transceiver
- Up to 40Gb/s for QSFP+ PSM Transceiver
- Simplex LC connector or Duplex LC for SFP & SFP+ Transceiver
- MPO connector for QSFP+ PSM Transceiver
- Support distance range from 550 M. up to 2 Km. for multimode and up to 80 Km. for singlemode

PoE



Industrial Hardened Gigabit Single-Port 60W PoE Injector

General Specifications :

- RJ45 ethernet data Input Port + 1 RJ45 power over ethernet output port (Data + Power)
- Support 60W LTPoE++ power sourcing equipment
- Compatible IEEE802.3at PoE+
- Support 10/100/1000Base-TX
- Extensive LED indicatiors for PoE diagnostics
- 48 - 57VDC terminal block power inputs
- Supports din-rail and wall-mount installation
- Environment hardened -40°C to 80°C (40°F to 176 °F) operating temperature



10/100/1000Mbps 60W Ultra PoE Injector

General Specifications :

- Input voltage 100 - 240 VAC
- Output voltage 46 - 52 VDC
- Support 60W power provided over pin 1 2 3 6
- Network standards IEEE802.3i 10Base-T, 100Base-TX, IEEE802.3af/IEEE802.3at
- LED indicatiors for link, speed, PoE active and PoE error
- 48V 1.25A power adapter
- Operating temperature 0°C to 40°C
- Storage temperature -10°C to 70°C

FIBER OPTIC

MEDIA CONVERTER, SFP TRANSCEIVER AND PoE

ITEM	DESCRIPTIONS	PRICE
	Media Converter Multimode	
1	Media Converter 10/100 MM DX SC 550 M.	1,200.-
2	Media Converter 10/100 MM DX SC 2 Km.	1,200.-
3	Media Converter 10/100 /1000 MM DX SC 550 M.	1,500.-
4	Media Converter 10/100 /1000 MM DX SC 2 Km.	1,500.-
	Media Converter Singlemode Single Fiber	
5	Media Converter 10/100 SM BiDi SC 10 Km. (Pair)	2,800.-
6	Media Converter 10/100 SM BiDi SC 40 Km. (Pair)	3,800.-
7	Media Converter 10/100/1000 SM BiDi SC 10 Km. (Pair)	7,600.-
8	Media Converter 10/100/1000 SM BiDi SC 40 Km. (Pair)	8,200.-
	Media Converter Singlemode Double Fiber	
9	Media Converter 10/100 SM DX SC 10 Km.	1,200.-
10	Media Converter 10/100 SM DX SC 40 Km.	1,550.-
11	Media Converter 10/100/1000 SM DX SC 10 Km.	1,500.-
12	Media Converter 10/100/1000 SM DX SC 40 Km.	1,950.-
	SFP Transceiver	
13	SFP 1.25G SM BiDi LC 10 Km. (Pair)	950.-
14	SFP 1.25G SM BiDi LC 20 Km. (Pair)	1,050.-
15	SFP 1.25G MM DX LC 550 M.	360.-
16	SFP 1.25G MM DX LC 2 Km.	400.-
17	SFP 1.25G SM DX LC 10 Km.	390.-
18	SFP 1.25G SM DX LC 20 Km.	420.-
	SFP+ Transceiver	
19	SFP+ 10G MM DX LC 300 M.	660.-
20	SFP+ 10G SM DX LC 10 Km.	1,100.-
21	SFP+ 10G SM DX LC 20 Km.	1,200.-
22	SFP+ 10G SM DX LC 40 Km.	7,200.-
23	SFP+ 10G SM DX LC 80 Km.	12,640.-
	PoE	
24	PoE Injector 1 Port 10/100/1000, Input 48 Vdc, 60W Industrial Grade	5,300.-
25	PoE Injector 1 Port 10/100/1000, Input 220 Vac, 60W	3,800.-

FIBER OPTIC

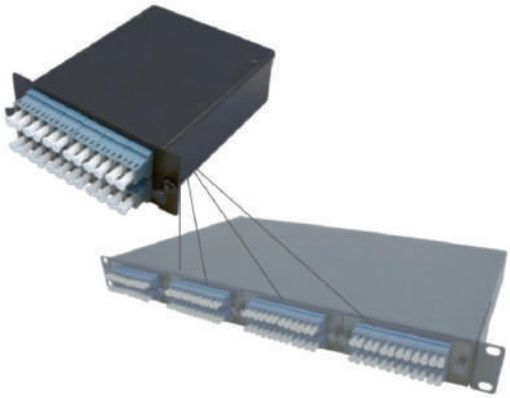
MPO/MTP SOLUTION

Data Center MPO/MTP Solution

MPO/MTP* connector advanced capabilities provide reliable connection for 40G/100G data centers. High-density fiber pre-connected system deploys high-density data center easily and quickly in horizontal area and storage area of the network. The maintenance and expansion in the future is very simple.
MPO/MTP pre-terminated cabling system consists of three parts: trunk cable, MPO/MTP pre-terminated module and patch panel.

* MTP is a US registered trademark of USCONEC

MPO/MTP-LC Fix Type Fiber Optical Cassette



TYPE		MODULE IL(MAX)
SM	Standard	1.0dB
	Low Loss	0.7dB
	Ultra-Low-Loss	0.5dB
MM	Standard	1.0dB
	Low Loss	0.7dB
	Ultra-Low-Loss	0.35dB

Introductions :

MPO/MTP LC fiber optic cassette is a closed type of device with a 12/24 core fiber Patch Cords for branching 12 core MPO/MTP trunk cable to LC Connectors so that the system appliances are easily be connected to the ports or panels. The cassette can be quickly deployed to 24 LC or 12 SC adapters and can be easily installed in HDF high density rack mounted ODF. The modular structure is high manageable and flexible. With the future requirements on the connectivity, the modules can be changed to meet the corresponding needs. In the meanwhile, the existing trunk cabling structure remains unchanged.

Features :

- Excellent transmission performance is 100% factory pre-terminated and tested
- The adoption of universal polarity design ensures the correct fiber polarity and the variety of polarity to be chosen in the system
- Flexible expansion, modular design
- One-hand operation
- Metal shell design, good intensity, effective protection for internal fiber branch parts
- Compliant with TIA/EIA 604-D-2007, IEC 61754-7-2008 series standards
- Super bend-bright fiber, minimum fiber bending radius, minimized structure
- Smooth upgrade to next generation data center of 40GbE and 100GbE applications

FIBER OPTIC

MPO/MTP SOLUTION

MPO/MTP-LC 40G to 4x10G Patch Cord



Introductions :

The fan out is applied to connect 12 core MPO/MTP connector to the LC connectors on the trunk cable. We provide both standard and customized branch lengths. When the network equipment is close to MPO patch panel frames, the length of fan out Patch Cords are minimized. For the hardware and equipment in the same cabinet, the longer Patch Cords can provide flexibility at any location and the branch cables can be winded into the vertical cable organizer.

Features :

- Array connectors with high precision low loss MPO/MTP connectors
- Smooth upgrading to next generation data center of 40GbE and 100GbE
- Outer jacket material option: PVC, LSZH and other selected materials
- Cable flammability rating: OFNR, OFNP, LSZH

	SINGLE MODE		MULTIMODE	
Insertion Loss	MPO/MTP	LC	MPO/MTP	LC
	Low Loss ≤0.35dB	≤0.3dB	Low Loss ≤0.35dB	≤0.3dB
	Standard Loss ≤0.7dB		Standard Loss ≤0.5dB	
Return Loss	≥60dB	≥50dB	≥30dB	≥30dB
Durabillity	<0.2 typical change, 500 matings			
Operating Temperature	-40 to + 85°C			

40G/100G MPO/MTP Trunk Fiber Optic Cable Patch Cord



Introductions :

Preterminated trunk cable can be from 4 to 144 cores with 8/12 pin MPO connector at both ends. High quality cable and MPO kits guarantee low insertion loss and high return loss for high speed network. Its efficient plug and play structure greatly reduces the initial installation and routine maintenance costs.
Preterminated trunk cables can also be used with plug and play modules or MPO/MTP connector panels to achieve multi level connection of the extension of the preterminated trunk cable can also be extended by MPO/MTP panel with plug and play module. The extended trunk cable is to be connected with another panel or fan out Patch Cords.

Features :

- Array of connectors with high precision low loss MPO/MTP connectors
- MPO/MTP connectors has been assembled at both ends of the cable. The optical performance is 100% tested
- A B C three polarity wiring options can be chosen from
- sufficient capacity can provide 4-144 cores fiber connections
- Cable flammability rating: OFNR, OFNP, LSZH
- The length of customized cable, trunk cable extension cable, branch cable can be accurate
- Traction tube is the optional for easy on site installation
- Minimize failures and reduces cabling space and installation time
- Smooth upgrading to next generation data center of 40GbE and 100GbE
- Outer jacket material option: PVC, LSZH and other selected materials

	SINGLEMODE	MULTIMODE
Insertion Loss	Low loss ≤0.35dB	Low loss ≤0.35dB
	Standard Loss ≤0.7dB	Standard Loss ≤0.5dB
Return Loss	≥60dB	≥30dB
Durability	<0.2 typical change, 500 matings	
Operating Temperature	-40 to + 85°C	
40G	8 Fiber	
100G	20 Fiber	

FIBER OPTIC

MPO/MTP SOLUTION

OM5 Product Series



Introductions :

The OM5 fiber has been approved as a new multimode optical fiber for high speed data center applications. And is designed to support at least four low cost wavelengths in the 850-950 nm range, enabling optimal support of emerging Shortwave Wavelength Division Multiplexing (SWDM) applications that reduce parallel fiber count by at least a factor of four to allow continued use of just two fibers (rather than eight) for transmitting 40 Gb/s and 100 Gb/s and reduced fiber counts for higher speeds. SWDM has many applications in Data Centers and other applications. OM5 cabling fully compatible and intermateable with OM3 and OM4 cabling.
The related OM5 Patch Cord, cassette and panels has attracted wide attention in the industry and the Patch Cord cover also all type of fiber connectors

Applications :

- Telecommunication network
- Data Center
- CATV, and Multimedia
- Optical switch interframe connection
- Asynchronous Transmission Mode (ATM)

Features :

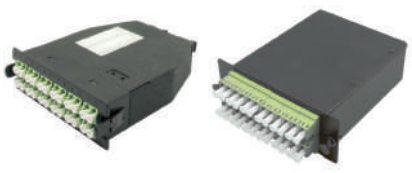
- Wavelength range 850-953 nm
- Low insertion loss and back reflection loss
- High precision alignment
- Good exchangeability
- High temperature stability
- Compatible with OM3 and OM4 Patch Cord

ITEM	SPECIFICATION
Fiber Type	OM5 (50 µm multimode fiber)
Wavelength Range	850-953 nm
Jacket Color	Lime Green
Furcation Color	Lime Green
Connector Type	MPO/MTP/LC/SC/FC/customized
Connector Color	customized
Regulatory Compliance	IEC 60793-2-10 /TIA-492AAAE/RoHS/ISO9001
Operating Temperature	-40 to + 85°C

Adapter and Cassette



LC Duplex Adapter
(SC Footprint) for OM5



LC Duplex Adapter
(SC Footprint) Cassette for OM5

FIBER OPTIC

MPO/MTP SOLUTION

ITEM	DESCRIPTIONS	PRICE
	MPO/MTP Patch Cord	
1	MPO/MTP - MPO/MTP MM OM3 Female/Female 12F/24F Type A/B/C	Call
2	MPO/MTP - MPO/MTP MM OM3 Female/Male 12F/24F Type A/B/C	Call
3	MPO/MTP - MPO/MTP MM OM4 Female/Female 12F/24F Type A/B/C	Call
4	MPO/MTP- MPO/MTP MM OM4 Female/Male 12F/24F Type A/B/C	Call
5	MPO/MTP - MPO/MTP MM OM5 Female/Female 12F/24F Type A/B/C	Call
6	MPO/MTP - MPO/MTP MM OM5 Female/Male 12F/24F Type A/B/C	Call
7	MPOA/MTPA - MPOA/MTPA SM Female/Female 12F/24F Type A/B/C	Call
8	MPOA/MTPA - MPOA/MTPA SM Female/Male 12F/24F Type A/B/C	Call
	MPO/MTP - LC Fan-out Patch Cord	
9	MPO/MTP - 8LC/12LC MM OM3 Round 3.0 mm.	Call
10	MPO/MTP - 8LC/12LC MM OM4 Round 3.0 mm.	Call
11	MPO/MTP - 8LC/12LC MM OM5 Round 3.0 mm.	Call
12	MPO/MTP - 8LC/12LC SM Round 3.0 mm.	Call
13	MPOA/MTPA - 8LC/12LC SM Round 3.0 mm.	Call
	MPO/MTP Cassette and Rack Mount	
14	MPO/MTP - 12LC MM OM3 Cassette	Call
15	MPO/MTP - 24LC MM OM3 Cassette	Call
16	MPO/MTP - 2x12LC MM OM3 Cassette	Call
17	MPO/MTP - 12LC MM OM4 Cassette	Call
18	MPO/MTP - 24LC MM OM4 Cassette	Call
19	MPO/MTP - 2x12LC MM OM4 Cassette	Call
20	MPO/MTP - 12LC MM OM5 Cassette	Call
21	MPO/MTP - 24LC MM OM5 Cassette	Call
22	MPO/MTP - 2x12LC MM OM5 Cassette	Call
23	MPO/MTP - 12LC SM Cassette	Call
24	MPO/MTP - 24LC SM Cassette	Call
25	MPO/MTP - 2x12LC SM Cassette	Call
26	ODF 12-72F (3 MPO Cassette SNAP) 1U Slide	Call
27	ODF 12-96F (4 MPO Cassette SNAP) 1U Fixed	Call

FIBER OPTIC

FTTx SOLUTION/FTTx RACK MOUNT WITH PLC SPLITTER







Introductions :

- Optical Splitter are fully passive optical branching devices that exhibit very low insertion loss and PDL, great channel uniformity and a wide wavelength operative range.

Features :

- High reliability
- High performance in terms of low insertion loss, low PDL and high return loss
- Suitable for 19"/21" standard rack
- Able to plug-in the PLC splitter cassette up to 1x16 or 2x16 for 1U rack mount and up to 1x32 or 2x32 for 2U rack mount

Applications :

- FTTH, FTTC, FTTB
- Passive Optical Network (PON)
- CATV networks and data communications
- Fiber optic equipment and systems

Specifications :

PORT CONFIGURATION	1×2	1×4	2×4	1×8	2×8	1×16	2×16	1×32	2×32
Rack Mount Height (U)	1U							2U	
Operating Wavelength (nm)	1260~1650								
Directivity (dB)	>55								
Return Loss (dB)	>55								
Operation Temperature (° C)	-40 ~+85								
PDL (dB)	<0.2	<0.3							
Insertion Loss (dB)	≤4.3	≤7.20	≤7.5	≤10.5	≤11.2	≤13.6	≤14.6	≤17.0	≤17.5
Loss Uniformity (dB)	≤0.5	≤0.6	≤1.2	≤0.8	≤1.5	≤1.4	≤2.0	≤1.6	≤2.5

FTTx Closure Horizontal with PLC Splitter, Snap Lock Type



CX-2022-S

Applications :

- Aerial, Wall-mounting and Pole-mounting

Features :

- The product is made of high-quality impact resistant plastic and has a standard user interface that can be re-opened.
- Can accommodate two 1x8 PLC splitter LGX module or steel tube type LGX module or steel tube type
- Anti-ultraviolet, anti-impact and waterproof function
- Unique flip board, flip angle ≥ 180°, fusion area and distribution area is more obvious and reducing the cable crossing
- Fiber optic cable can go in and out of the box without cut the cable



CX-803

Applications :

- Aerial Mounting Only

Features :

- Providing protection for Fiber Cut & Fiber Fusion
- Storage for Pigtails, Optic Cable, Drop Cable
- Parallel incoming & outgoing for main cable
- PC/ABS Case for Aerial Support Design
- Protect level IP-65 (with sealing gasket made of Silicone Rubber)



CX-9417

Applications :

- Aerial, Wall-mounting, Pole-mounting, Hand hole-mounting and underground

Features :

- Hinge structure, watertight and no screw design, open easily and user friendly
- Material made of PP+GF
- Mechanical seal type, sealed by buckles
- Support maximum 120F
- Support splice tray 24F, maximum 5 pcs
- Support blockless splitter PLC 1/8 or 1/16 with SC adapters
- Inlet 3 ports and outlet 3 ports
- Meet protection grade IP68

FIBER OPTIC

FTTx SOLUTION/FTTx FIBER TERMINAL BOX AND SOCKET BOX

FTTx Fiber Terminal Box



FTB-106C



FTB-8



FTB-16

Applications :

- Wall-mounting and Pole-mounting

Features :

- Water-proof design with IP66 for FTB-106C and IP55 for FTB-8, FTB-16
- Integrated with splice cassette and cable management rods
- Manage fibers in a reasonable fiber radius condition
- Easy to maintain and extend the capacity
- Fiber bend redius control more than 40 mm.
- Suitable for the fusion splice or mechanical splice
- Can be installed as an option
  - 1x2, 1x4 splitter for model FTB-106C
  - 1x8 splitter for model FTB-8 and FTB-16
  - 1x16 splitter for model FTB-16
- Efficient cable management
- Cable entrance for drop cable
  - 6 ports for model FTB-106C
  - 8 ports for model FTB-8
  - 16 ports for model FTB-16

FTTx Fiber Socket Box And Outlet

Applications :

- Singlemode and multimode fiber
- FTTx applications

Features :

- FTTx Socket Box can be multi-use to achieve a variety of fiber optic cable
- Protection of optical fiber
- Reduce the potential risk
- Simple and convenient for installation



FS-1B



FCS-02



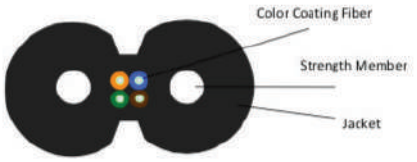
FCS-04

FIBER OPTIC

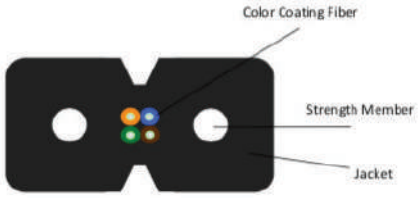
FTTx SOLUTION/FTTx DROP CABLE

Fiber Drop Cable

Structure & Capability



Fiber Round Drop Cable

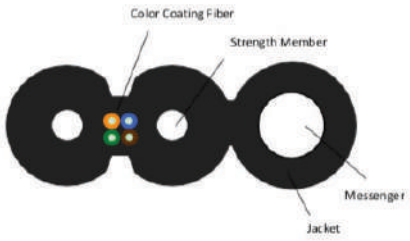


Fiber Flat Drop Cable

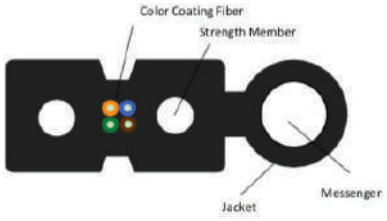
PARAMETER	
Fiber Count	1-4
Cable Dimension (mm)	2.0×3.0
Weight (kg)	8.0
STRUCTURE	
Description	Color Coating Fiber, Strength Member, Jacket
Fiber	SM : G652D, G655, G657A2 or other singlemode optical fiber MM : OM2, OM3, OM4 or other multimode fiber
Strength Member	FRP or steel wire
Jacket	Materials : flame retardant polyvinyl chloride (PVC), low smoke halogen free flame retardant polyolefin (LSZH) or other materials
FEATURES	
Application	Used as terminal connection in FTTx access network
Characteristic	Good mechanical and environmental performance Flame retardant (or non-flame retarding) characteristic meets the requirements of relevant standards
Temperature	-20°C~+60°C

Fiber Self-support Drop Cable

Structure & Capability



Fiber Self Support Round Drop Cable



Fiber Self Support Flat Drop Cable

PARAMETER	
Fiber Count	1-4
Cable Dimension (mm)	2.0x5.2
Weight (kg)	18.0
STRUCTURE	
Description	Color Coating Fiber, Strength member, Messenger, Jacket
Fiber	SM : G652, G655, G657A2 or other singlemode optical fiber MM : OM2, OM3, OM4 or other multimode fiber
Strength Member	FRP, steel wire or other high strength member
Messenger	FRP, steel wire or other high strength member
Jacket	Materials : flame retardant polyvinyl chloride (PVC), low smoke halogen free flame retardant polyolefin (LSZH) or other materials
FEATURES	
Application	Used as terminal connection in FTTx access network
Characteristic	Good mechanical and environmental performance Flame retardant (or non-flame retarding) characteristic meets the requirements of relevant standards
Temperature	-20°C~+60°C

FIBER OPTIC

FTTx SOLUTION

PART NO.	DESCRIPTIONS	PRICE
	FTTx Splitter Rack Mount	
RX-S1LG-SPP12-2U5	Fiber Distribution Rack Mount with PLC Splitter 1/2, SC Adapter	2,000.-
RX-S1LG-SPP14-2U5	Fiber Distribution Rack Mount with PLC Splitter 1/4, SC Adapter	2,200.-
RX-S1LG-SPP18-2U5	Fiber Distribution Rack Mount with PLC Splitter 1/8, SC Adapter	2,500.-
RX-S1LG-SPP1S-2U5	Fiber Distribution Rack Mount with PLC Splitter 1/16, SC Adapter	3,300.-
RX-S1LG-SPP1T-2U5	Fiber Distribution Rack Mount with PLC Splitter 1/32, SC Adapter	5,800.-
	FTTx Splitter Wall/Pole Mount	
FTB106C-SPP14-2U5	Fiber Terminal Box with PLC Splitter 1/4, SC Adapter	1,200.-
FTB8-SPP18-2U5	Fiber Terminal Box with PLC Splitter 1/8, SC Adapter	1,460.-
FTB16-SPP1S-2U5	Fiber Terminal Box with PLC Splitter 1/16, SC Adapter	1,700.-
FTB32-SPP1T-2U5	Fiber Terminal Box with PLC Splitter 1/32, SC Adapter	Call
	FTTx Closure	
CX-2022-S-SPP12	FTTx Closure, Horizontal with PLC Splitter 1/2, Snap Lock Type	1,500.-
CX-2022-S-SPP14	FTTx Closure, Horizontal with PLC Splitter 1/4, Snap Lock Type	1,630.-
CX-2022-S-SPP18	FTTx Closure, Horizontal with PLC Splitter 1/8, Snap Lock Type	1,825.-
CX-2022-S-SPP1S	FTTx Closure, Horizontal with PLC Splitter 1/16, Snap Lock Type	2,320.-
CX-803-SPP12	FTTx Closure, Horizontal with PLC Splitter 1/2, Snap Lock Type	1,550.-
CX-803-SPP14	FTTx Closure, Horizontal with PLC Splitter 1/4, Snap Lock Type	1,630.-
CX-803-SPP18	FTTx Closure, Horizontal with PLC Splitter 1/8, Snap Lock Type	1,825.-
CX-9417-SPP12	FTTx Closure, Horizontal with PLC Splitter 1/2, Snap Lock Type	1,700.-
CX-9417-SPP14	FTTx Closure, Horizontal with PLC Splitter 1/4, Snap Lock Type	1,790.-
CX-9417-SPP18	FTTx Closure, Horizontal with PLC Splitter 1/8, Snap Lock Type	2,000.-
CX-9417-SPP1S	FTTx Closure, Horizontal with PLC Splitter 1/16, Snap Lock Type	2,550.-
	FTTx Drop Cable	
CAD1FF5-N-B	Fiber Drop Cable 1F Flat Type, Singlemode	3.00.-/M
CAD1FF5-M1-B	Fiber Drop Cable 1F Self Supporting Flat Type, Singlemode	3.50.-/M
CAD1RF5-N-B	Fiber Drop Cable 1F Round Type, Singlemode	6.00.-/M
CAD1RF5-M1-B	Fiber Drop Cable 1F Self Supporting Round Type, Singlemode	7.00.-/M
CAD2FF5-N-B	Fiber Drop Cable 2F Flat Type, Singlemode	3.75.-/M
CAD2FF5-M1-B	Fiber Drop Cable 2F Self Supporting Flat Type, Singlemode	5.00.-/M
CAD2RF5-N-B	Fiber Drop Cable 2F Round Type, Singlemode	7.00.-/M
CAD2RF5-M1-B	Fiber Drop Cable 2F Self Supporting Round Type, Singlemode	8.75.-/M





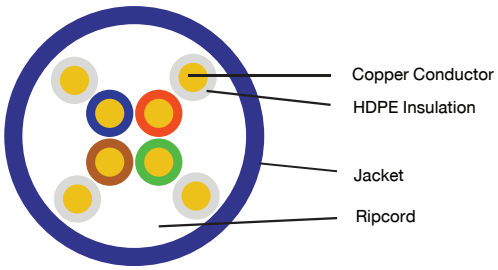
LAN NETWORKING



LAN NETWORKING

LAN CABLE

CAT5E UTP Cable



P/N : AL-7111-B*



*Color Code; R(Red), W(White), Y(Yellow), G(Green), GR(Gray), B(Blue)

U/UTP CAT5E 24AWG LAN Cable

Applications :
- 100 Base-TX
- 100 Base-T
- 100VG-AnyLAN
- 1000 Base-T(Gigabit Ethernet)
- 1000Base-TX
- 155Mbps ATM
- Data Center, VoIP, ISDN, PoE, IoT, CCTV

Standards :
- ANSI/TIA 568.2-D Cat5e
- ISO/IEC 11801:2017 Class D
- IEC61156
- UL444

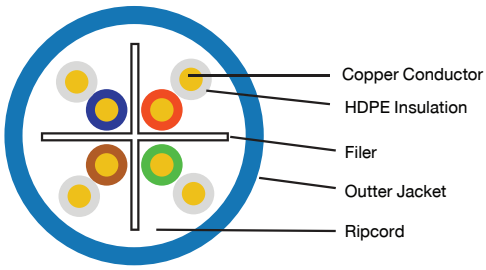
Operating temperature : 60 °C

Structures :
- Construction : U/UTP
- Conductor dimension : 24AWG
- Conductor material : Solid copper

Insulations :
- Insulation material : HDPE
- Insulation dimension : 0.91 mm

Sheaths :
- Outer jacket material : CM/CMR PVC, LSZH
- Thickness : 0.6 mm
- Outer O.D. : 5.2 mm
- Outer jacket color : As customer request
- Ripcord : Yes

CAT6 UTP Cable



P/N : AL-7122-B*



*Color Code; R(Red), W(White), Y(Yellow), G(Green), GR(Gray), B(Blue)

U/UTP CAT6 23AWG LAN Cable

Applications :
- 100 Base-TX
- 100 Base-T
- 100VG-AnyLAN
- 1000 Base-T(Gigabit Ethernet)
- 1000 Base-TX
- 10G Base-T (@ 55M)
- 155Mbps ATM
- 622 Mbps ATM
- Data Center, VoIP, ISDN, PoE, IoT, CCTV

Standards :
- ANSI/TIA 568.2-D Cat6
- ISO/IEC 11801:2017 Class E
- IEC61156
- UL444

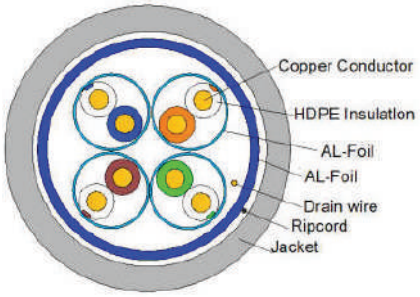
Operating temperature : 60 °C

Structures :
- Construction : U/UTP
- Conductor dimension : 23AWG
- Conductor material : Solid copper

Insulations :
- Insulation material : HDPE
- Insulation dimension : 0.96 mm
- Cross filer : Yes

Sheaths :
- Outer jacket material : CM/CMR PVC, LSZH
- Outer jacket color : As customer request
- Ripcord : Yes

SHIELDED CAT6A F/FTP CABLE





P/N : AL-7135-B*

*Color Code; BK(Black), AQ(Aqua), W(White), R(Red)
Y(Yellow), G(Green), GR(Gray), B(Blue)

F/FTP CAT6A 23AWG LAN Cable

Applications :
- 100 Base-TX
- 100 Base-T
- 1000 Base-T(Gigabit Ethernet)
- 1000 Base-TX
- 10G Base-T
- 155Mbps ATM
- 622 Mbps ATM
- Data Center, VoIP, ISDN, PoE, IoT, CCTV

Standards :
- ANSI/TIA 568.2-D Cat6A
- ISO/IEC 11801:2017 Class Ea
- IEC61156-5
- UL444
- Flame test IEC60332-1

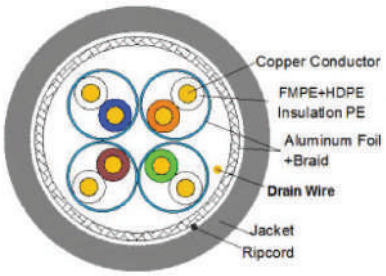
Operating temperature : 60 °C

Structures :
- Construction : F/FTP
- Conductor dimension : 23AWG (0.57±0.01mm)
- Conductor material : Solid copper
- 1st Shielded : AL-Foil
- 2nd Shielded : AL-Foil
- Minimum bending radius : 8 x outer diameter
- Pairs : Twisted, more than one twist every 15 cm

Insulations :
- Insulation material : FOAM PE & HDPE
- Insulation dimension : 1.38±0.05 mm

Sheaths :
- Outer jacket material : CM/CMR PVC, LSZH
- Outer jacket color : As customer request
- Ripcord : Yes

SHIELDED CAT6A S/FTP CABLE





P/N : AL-7136B*

*Color Code; BK(Black), AQ(Aqua), W(White), R(Red)
Y(Yellow), G(Green), GR(Gray), B(Blue)

S/FTP CAT6A 23AWG LAN Cable

Applications :
- 100 Base-TX
- 100 Base-T
- 1000 Base-T (Gigabit Ethernet)
- 1000 Base-TX
- 10G Base-T
- 155 Mbps ATM
- 622 Mbps ATM
- Data Center, VoIP, ISDN, PoE, IoT, CCTV

Standards :
- ANSI/TIA 568.2-D Cat6A
- ISO/IEC 11801
- EN50173

Operating temperature : 60 °C

Structures :
- Construction : S/FTP
- Conductor dimension : 23AWG (0.57±0.01mm)
- Conductor material : Solid copper
- 1st Shielded : AL-Foil
- 2nd Shielded : AL-MG brald
- Shield coverage : ≥40%
- Drain wire : 0.40 mm Tinned copper

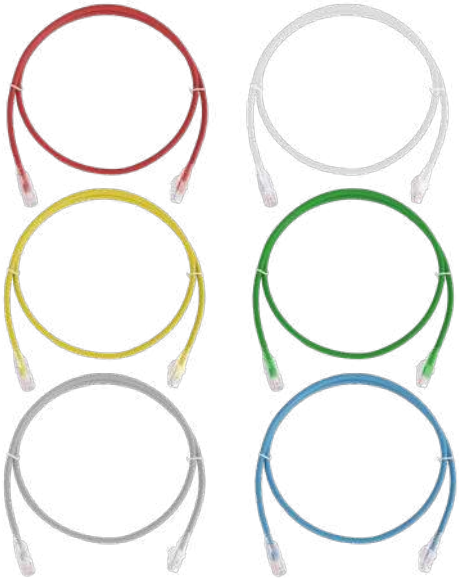
Insulations :
- Insulation material : FOAM PE & HDPE
- Insulation dimension : 1.38±0.05 mm

Sheaths :
- Outer jacket material : LSZH
- Outer jacket color : As customer request
- Ripcord : Yes
- Overall diameter : 7.7±0.3 mm

LAN NETWORKING

LAN PATCH CORD

CAT6 RJ45-RJ45 PATCH CORD



P/N : AL-6122X*

* Color Code; R(Red), W(White), Y(Yellow), G(Green), GR(Gray), B(Blue)

UTP Patch Cord

Applications :
- 100 Base-TX
- 100 Base-T
- 100VG-AnyLAN
- 1000 Base-T(Gigabit Ethernet)
- 1000 Base-TX
- 10G Base-T (@ 55M)
- 622 Mbps ATM
- Data Center, VoIP, ISDN, PoE, IoT, CCTV

Standards :
- ANSI/TIA 568-C.2 Cat6
- ISO/IEC 11801:2017 Class E
- EN50173-1
- UL444

Specifications :

- Cable construction :	UTP 4P stranded flexible wire 24AWG pure copper
- Cable insulation :	HDPE
- Cable outer jacket :	CM PVC, LSZH
- Cable color :	Red, white, yellow, green, gray, blue
- Connector :	RJ45 Cat6 modular plug
- Connector material :	50-micron gold plating over nickel plated and phosphor bronze
- Boot :	Molding from manufacture
- Testing :	100% factory assembly and testing
- Certified :	RoHS, CE, UL
- Operating temperature :	60 °C

SHIELDED CAT6A RJ45-RJ45 PATCH CORD



P/N : AL-6131X*

* Color Code; R(Red), W(White), Y(Yellow), G(Green), GR(Gray), B(Blue)

S/FTP Patch Cord

Applications :
- 100 Base-TX
- 100 Base-T
- 100VG-AnyLAN
- 1000 Base-T(Gigabit Ethernet)
- 1000 Base-TX
- 10G Base-T
- 622 Mbps ATM
- Data Center, VoIP, ISDN, PoE, IoT, CCTV

Standards :
- ANSI/TIA 568-C.2 Cat6A
- ISO/IEC 11801:2017 Class E
- IEC61156
- UL444, UL1581, UL1666

Specifications :

- Cable construction :	F/UTP 4P stranded flexible wire 26AWG pure copper
- Cable insulation :	HDPE
- 1st Shielded :	AL-Foil
- 2nd Shielded :	AL alloy braiding
- Cable outer jacket :	LSZH
- Cable color :	Red, white, yellow, green, gray, blue
- Connector :	FTP RJ45 Cat6A modular plug
- Connector material :	50-micron gold plating over nickel plated and phosphor bronze
- Boot :	Molding from manufacture
- Testing :	100% factory assembly and testing
- Certified :	RoHS, CE, UL
- Operating temperature :	60 °C

LAN NETWORKING

MODULAR PLUG AND BOOT

RJ45 Modular Plug



P/N : AL-1121



P/N : AL-1131



P/N : AL-1121S



P/N : AL-1131S



P/N : AL-1132

Applications :
- 10 Base-T (IEEE 802.3 Ethernet)
- 100 Base-TX (IEEE 802.3u Fast Ethernet)
- 1000 Base-T (IEEE 802.3ab Gigabit Ethernet)
- PoE (IEEE 802.3af, IEEE 802.3at)

Standards :
- ANSI/TIA-568-C.2, ANSI/TIA-568.2-D
- ISO/IEC 11801: 2017 Class D, Cat5e
- ISO/IEC 11801: 2017 Class E, Cat6
- EN 50173-1

Physical :

- Contact durability:	1200 mating cycles
- Wiring pattern:	Universal color pattern T568A/T568B
- Wire gauge:	22 - 26 AWG solid and stranded wire
- Boot support:	RJ45 standard boot and locking boot
- Cable diameter support:	5 - 9 mm

Constructions :

CAT5E

- Modular plug :	8 pins with 3 prong contacts
- Body material :	High impact polycarbonate
- Conductor pin :	Phosphor bronze with gold plated 50-micron
- Shielded :	Bronze with nickel plated (only shield part)

CAT6

- Modular plug :	8 pins 2 layers with pre-insert bar
- Body material :	High impact polycarbonate
- Pre-insert bar :	High impact polycarbonate
- Conductor pin :	Phosphor bronze with gold plated 50-micron
- Shielded :	Bronze with nickel plated (only shield part)

SHIELDED CAT6A RJ45 MODULAR PLUG



P/N : AL-1141S



P/N : AL-1145S

Applications :
- 10 G (XG)
- IEEE 802.3
- 10 G Base - T
- 1000 Base - T

Standards :
- ANSI/TIA-568-C.2 Category 6A
- ISO IEC-11801:2017 Class EA
- EN55032:2015
- EN55024:2010+A1:2015
- IEEE 802.3an (10G Base T)
- EMC compliant
- RoHS compliant

RJ45 Modular Plug BOOT



P/N : AL-1211X*



P/N : AL-1221X*

Applications :
- Cover for protect RJ45 modular plug and cable

Material :
- PVC with rubber

Color :

- Standard boot :	Blue, yellow, green, red, white, gray
- Locking boot :	Blue, yellow, green, red, white, transparent

Cable Diameter :

- Standard boot CAT5E :	5.5 mm
- Standard boot CAT6 :	6 mm
- Locking boot CAT6 :	6 mm

*Color; B(Blue), Y(Yellow), G(Green), R(Red), W(White), GR(Gray), T(Transparent)

LAN NETWORKING

MODULAR JACK AND IN-LINE COUPLER

CAT6 RJ45 MODULAR JACK



P/N : AL-2123



P/N : AL-2121

Applications :
- 10 BASE-T (IEEE 802.3)
- 100 BASE-TX (IEEE 802.3U)
- 1000 Base - T (IEEE 802.3ab)
- Data center, VoIP, ISDN, POE, CCTV and others

Standards :
- ANSI/TIA-568-C.2 Category 6
- ISO IEC-11801 : 2017
- IEEE 802.3ab
- IEC 60603-7-4, FCC part 68, subpart F

SHIELDED CAT6A RJ45 MODULAR JACK (SLIM TOOL FREE)



P/N : AL-2134S

Applications :
- 10 BASE-T (IEEE 802.3)
- 100 BASE-TX (IEEE 802.3U)
- 1000 Base - T (IEEE 802.3ab)
- 10G (XG)
- Data center, VoIP, ISDN, POE, CCTV and others
- To mounting on patch panel or face plate

Standards :
- ANSI/TIA-568-C.2 Category 6A
- ISO IEC-11801: 2017 Class EA
- IEEE 802.3an (10G Base T)
- EMC compliant

CAT6 RJ45 IN-LINE COUPLER (FEMALE-FEMALE)



P/N : AL-3122



P/N : AL-3121S

Applications :
- 10 BASE-T (IEEE 802.3)
- 100 BASE-TX (IEEE 802.3U)
- 1000 Base - T (IEEE 802.3ab)
- Data center, VoIP, ISDN, POE, CCTV and others

Standards :
- ANSI/TIA-568-C.2 Category 6
- ISO IEC-11801:2017 Class EA
- EN55032:2015
- EN55024:2010+A1:2015
- IEEE 802.3an (10G Base T)
- EMC compliant
- RoHS compliant

SHIELDED CAT6A RJ45 IN-LINE COUPLER (FEMALE-FEMALE)



P/N : AL-3131S

Applications :
- 10 BASE-T (IEEE 802.3)
- 100 BASE-TX (IEEE 802.3U)
- 1000 Base - T (IEEE 802.3ab)
- 10G Base - T (IEEE 802.3an)
- Data center, VoIP, ISDN, POE, CCTV and others

Standards :
- ANSI/TIA-568-C.2 Category 6A
- ISO IEC-11801: 2017 Class EA
- EN55032 : 2015
- EN55024 : 2010+A1 : 2015
- IEEE 802.3an (10G Base T)
- EMC compliant
- RoHS compliant

LAN NETWORKING

LAN PATCH PANEL

CAT5E AND Cat6 Ethernet Patch Panel



P/N : AL-4111 (CAT5E)
P/N : AL-4121 (CAT6)



P/N : AL-4112 (CAT5E)
P/N : AL-4122 (CAT6)

Overview :
Manage traffic simply and effectively in Ethernet applications with Ethernet patch panels. Each compact panel is equipped with IDC terminated PCB assemblies in either 568A or 568B pinouts. Cat5e and Cat6 patch cords are also available to complete your installations.

Applications :
- 10/100/1000 Ethernet connectivity
- Data applications
- Private/enterprise networks
- T1/DDS TDM connectivity and patching

Cat5e Patch Panel :
- Exceed Category 5e TIA/EIA-568-B.2 specifications for component performance
- Handle data rates exceeding 100 MHz

Cat6 Patch Panel :
- Exceed Category 6 TIA/EIA-568-B.2 specifications for channel and link performance
- Handle data rates exceeding 250 MHz
- Angled and paired IDC pins provide a gas-tight connection and improved cable retention to maximize Cat6 performance

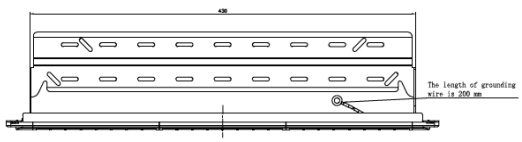
Primary Benefits :
- Versatility for a variety of applications, including Ethernet 10/100/1000, T1 and DDS patching
- 24 and 48 position Category 5e and Category 6 panels available, 1RU and 2RU 19-inch rack mounting
- Rugged steel construction with rolled edges to eliminate flex during termination
- Integrated rear cable management bar provides cable strain relief
- Multiple cable tie locations to meet your standard practices and simplify moves, adds, changes and maintenance
- Clear write-on designation and easy to identify ports
- Complete line of Cat5e and Cat6 patch cords in various standard lengths and colors also available

Patch Panel Dimensions:
- 24 Port patch panel : 19 in. W x 1.75 in. H x 3.5 in. D (48.26 cm x 4.45 cm x 8.89 cm)
- 48 Port patch panel : 19 in. W x 3.5 in. H x 3.5 in. D (48.26 cm x 8.89 cm x 8.89 cm)

SHIELDED UNLOAD PATCH PANEL 19" 1U 24 PORT







P/N : AL-4196S

Applications :
- 1000 BASE-T (IEEE 802.3ab Gigabit Ethernet)
- 100 BASE-TX (IEEE 802.3u Fast Ethernet)
- 10 BASE-T (IEEE 802.3 Ethernet)
- 52/155/622Mbps and 1.2Gbps ATM
- 4/16 Mbps Token Ring
- POE (IEEE 802.3af, IEEE 802.3at)
- TP-PMD, TPDDI, ISDN, VoIP
- Baseband, broadband
- Analog & digital voice, digital & analog video

Specifications :
- All-metal accessories, the bracket comes with grounding cable to maximize the grounding capacity, which can effectively protect electromagnetic interference and radio frequency interference and provide excellent alien crosstalk suppression
- Full working area with universal shielding module, easy disassembly and tool free termination
- Support shielded and unshielded modules free transfer
- Support CAT5E/CAT6/CAT6A RJ45 female connector or In-line coupler
- Back bar management
- ID Label
- Insertion life: 1000 times
- Humidity: 10% to 90% RH
- Rated temperature: -20 ~ 70 °C
- Dimension: Height 1U 48.26 cm (W) x 8.89 cm (D)

LAN NETWORKING

FACE PLATE AND TOOLS

FACE PLATE WITH SHUTTLE, ICON & ID LABEL



P/N : AL-5111



P/N : AL-5112

Applications :
- Designed for RJ45 computer outlet
- Install with RJ45 modular jack both unshielded & shielded
- Mounting on wall type or socket box

Specifications :

- Material :	ABS
- Color :	Sandblasting ivory
- Icon :	Computer, telephone
- ID Label :	White paper with transparent plastic cover
- Shuttle :	Auto
- Support :	RJ45 modular jack RJ45 modular jack tool free Shielded RJ45 modular jack
- Dimensions :	L114 x W70 x 7 mm

FACE PLATE SMART WITH SHUTTLE (STANDARD 2X4")



P/N : AL-5151

Applications :
- Designed for RJ45 computer outlet
- Install with RJ45 modular jack both unshielded & shielded
- Mounting on wall type or socket box

Specifications :

- Material :	ABS
- Color :	Shiny white
- Shuttle :	Auto
- Support :	RJ45 modular jack RJ45 modular jack tool free Shielded RJ45 modular jack
- Dimensions :	L120 x W70 x H10 mm (standard 2x4")

4P/6P/8P MODULAR PLUG CRIMPING TOOL



P/N : CP-376TR

Applications :
- For 4/6/8P modular connector
- Stripping twisted pair wire & flat wire
- Dual color design handle
- Ratchet force-saving system

MINI LAN CABLE TESTER



P/N : MT-7051N

Applications :
- Tests RJ45 TIA568A/B (AT&T 258A), 10 Base-T, Token ring, RJ-11/RJ-12 USOC and coaxial BNC cable
- Automatically check cable for continuity, short, open and crossed wire paires
- Coaxial cable port indentifiers cable conditions including shorts, shield opens and center conductor breaks
- Main unit and remote allow one person testing

Power source :	DC 9V battery
Dimensions (mm) :	102 x 106 x 28

Cable not include

LAN NETWORKING

LAN PRODUCTS

PART NO.	DESCRIPTIONS	PRICE
	LAN Cable	
AL-7111-X*	UTP Cable CAT5E 24AWG CM PVC XXX 305M "ALFA BASE"	3,150.-
AL-7121-X*	UTP Cable CAT6 24AWG CM PVC XXX 305M "ALFA BASE"	3,500.-
AL-7124-X*	UTP Cable CAT6 23AWG LSZH XXX 305M "ALFA BASE"	3,665.-
AL-7135-X*	Shielded F/FTP Cable CAT6A 23AWG LSZH XXX 305M "ALFA BASE"	6,400.-
AL-7136-X*	Shielded S/FTP Cable CAT6A 23AWG LSZH XXX 305M "ALFA BASE"	6,450.-
	LAN Patch Cord	
AL-6122X*-1	CAT6 RJ45-RJ45 Patch Cord LSZH XXX 1M "ALFA BASE"	40.-
AL-6122X*-2	CAT6 RJ45-RJ45 Patch Cord LSZH XXX 2M "ALFA BASE"	64.-
AL-6122X*-3	CAT6 RJ45-RJ45 Patch Cord LSZH XXX 3M "ALFA BASE"	75.-
AL-6122X*-5	CAT6 RJ45-RJ45 Patch Cord LSZH XXX 5M "ALFA BASE"	106.-
AL-6122X*-10	CAT6 RJ45-RJ45 Patch Cord LSZH XXX 10M "ALFA BASE"	180.-
AL-6122X*-15	CAT6 RJ45-RJ45 Patch Cord LSZH XXX 15M "ALFA BASE"	257.-
AL-6131X*-1	Shielded S/FTP CAT6A RJ45-RJ45 Patch Cord LSZH XXX 1M "ALFA BASE"	78.-
AL-6131X*-2	Shielded S/FTP CAT6A RJ45-RJ45 Patch Cord LSZH XXX 2M "ALFA BASE"	125.-
AL-6131X*-3	Shielded S/FTP CAT6A RJ45-RJ45 Patch Cord LSZH XXX 3M "ALFA BASE"	136.-
AL-6131X*-5	Shielded S/FTP CAT6A RJ45-RJ45 Patch Cord LSZH XXX 5M "ALFA BASE"	188.-
AL-6131X*-10	Shielded S/FTP CAT6A RJ45-RJ45 Patch Cord LSZH XXX 10M "ALFA BASE"	326.-
AL-6131X*-15	Shielded S/FTP CAT6A RJ45-RJ45 Patch Cord LSZH XXX 15M "ALFA BASE"	465.-
	RJ45 Modular Plug	
AL-1121	CAT5E RJ45 Modular Plug "ALFA BASE"	3.50.-
AL-1131	CAT6 RJ45 Modular Plug with Insert Bar "ALFA BASE"	5.-
AL-1132	CAT6 RJ45 Modular Plug Through Hole "ALFA BASE"	4.-
AL-1131S	Shielded CAT6 RJ45 Modular Plug with Insert Bar "ALFA BASE"	9.-
AL-1141S	Shielded CAT6A Modular Plug with Transparent Boot "ALFA BASE"	27.-
AL-1145S	Shielded CAT6A Modular Plug Field Terminated Tool Free "ALFA BASE"	135.-
AL-1146S	Shielded CAT6A Modular Plug Tool Free with Pull Tab "ALFA BASE"	145.-
	RJ45 Modular Plug Boot	
AL-1231X*	Modular Plug Boot CAT5E RJ45, XXX "ALFA BASE"	2.-
AL-1221X*	Modular Plug Locking Boot CAT6 RJ45, XXX "ALFA BASE"	3.-
	RJ45 Modular Jack	
AL-2121	CAT6 RJ45 Modular Jack IDC "ALFA BASE"	43.-
AL-2123	CAT6 RJ45 Modular Jack Tool Free White "ALFA BASE"	60.-
AL-2134S	Shielded CAT6A RJ45 Modular Jack Slim, Tool Free "ALFA BASE"	98.-

X* = Color Code ; BK(Black), AQ(Aqua), AB(Aqua Blue), W(White), R(Red), Y(Yellow), G(Green), GR(Gray), B(Blue)

LAN NETWORKING

LAN PRODUCTS

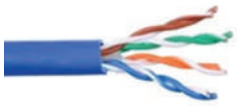
PART NO.	DESCRIPTIONS	PRICE
	In-Line Coupler	
AL-3122	CAT6 RJ45 In-Line Coupler 50U White "ALFA BASE"	35.-
AL-3121S	Shielded CAT6 RJ45 In-Line Coupler 50U "ALFA BASE"	82.-
AL-3131S	Shielded CAT6A RJ45 In-Line Coupler "ALFA BASE"	155.-
	LAN Patch Panel	
AL-4121	CAT6 Patch Panel 24 Port 1U with RJ45 Modular Jack IDC "ALFA BASE"	1,600.-
AL-4122	CAT6 Patch Panel 48 Port 2U with RJ45 Modular Jack IDC "ALFA BASE"	2,800.-
AL-4196S	Shielded Unload FTP Patch Panel 19" 1U 24P "ALFA BASE"	670.-
	Face Plate	
AL-5111	Face Plate for RJ45 Keystone 1 port with Shuttle, ID Label "ALFA BASE"	22.-
AL-5112	Face Plate for RJ45 Keystone 2 ports with Shuttle, ID Label "ALFA BASE"	22.-
	Cable Management Panel 19"	
CA-6601	Cable Management Panel 19" 5 Metal Rings "ALFA BASE"	256.-
CA-6602	Cable Management Panel 19" 1U with Cover "ALFA BASE"	280.-
CA-6603	Cable Management Panel 19" 5 Plastic Rings "ALFA BASE"	195.-

TIP

ความแตกต่างของโครงสร้างสาย UTP แต่ละชนิด

1. สาย U/UTP : Unshielded Twisted Pairs

สายชนิดนี้ โดยทั่วไปจะเรียกว่าสาย UTP ซึ่งจะเป็นสายที่ไม่มี Shield เพื่อป้องกันสัญญาณรบกวนทั้ง Noise และ EMI



2. สาย F/UTP : Foiled with Unshielded Twisted Pairs

สายชนิดนี้ จะมี Foil Shield เพิ่มเข้ามาในโครงสร้างสายของ U/UTP เพื่อมาหุ้มสาย Twisted Pairs ทั้งหมดอีกชั้นหนึ่งเพื่อป้องกันสัญญาณรบกวนทั้ง Noise และ EMI



3. สาย F/FTP : Foiled with Foiled Twisted Pairs

สายชนิดนี้ จะมี Foil Shield เพิ่มเข้ามาในโครงสร้างสายของ F/UTP โดย Foil Shield ที่เพิ่มเข้ามาจะหุ้มสาย Twisted Pair ในแต่ละคู่สาย เพื่อเป็นการป้องกันสัญญาณรบกวนให้ดีขึ้นจาก Noise และ EMI รวมทั้ง Crosstalk ที่เกิดขึ้นระหว่างคู่สาย Twisted Pairs ที่อยู่ติดกัน และป้องกันสัญญาณรบกวนจากสายเส้นอื่น ๆ ที่อยู่ใกล้กันด้วย



4. สาย S/FTP : Shielded with Foiled Twisted Pairs

สายชนิดนี้ จะมีโครงสร้างคล้ายกับสาย F/FTP แต่จะเปลี่ยนจาก Foil Shield ที่หุ้มสาย Twisted Pairs ทั้งหมด มาเป็น Braid Shield ซึ่ง Braid Shield จะสามารถป้องกันสัญญาณรบกวนได้ดีกว่า









TELECOM
PRODUCT





TELECOM PRODUCT

COAXIAL CONNECTOR



BNC Male Connector
Crimp Type



BNC Male Connector
Solder Type



J-J Adapter



J-J Isolated Adapter



U-Link Cable W/Monitor



U-Link Metal W/Monitor



U-Link Cable



SMB Female Connector



SAA 1.0/2.3 Connector



DIN 1.6/5.6 Female Connector



N-Type Male/Female Connector



F-Type Connector

TELECOM PRODUCT

COAXIAL CONNECTOR

PART NO.	DESCRIPTIONS	PRICE
	BNC Connector	
CO-3011	BNC Male Crimp Type 75 Ohm for RG179	50.-
CO-3025	BNC Male Crimp Type 75 Ohm for 2.5C-2V	50.-
CO-3031	BNC Male Crimp Type 75 Ohm for 3C-2V	65-
CO-3041	BNC Male Crimp Type 75 Ohm for RG59	70.-
CO-3002	BNC Male Solder Type 75 Ohm for RG179	90.-
CO-3024	BNC Male Solder Type 75 Ohm for 2.5C-2V	90.-
CO-3012-HN	BNC Male Solder Type 75 Ohm for Micro Coax (2C)	90.-
CO-3003-CN	BNC Female Bulk Head 75 Ohm for RG179	100.-
AD-3601-A	BNC J-J (I) B/H Adapter	50.-
AD-3611-A	BNC J-J (I) B/H Isolated Adapter	65.-
AD-3712C	BNC U-Link Flexible Cable Type	140.-
AD-3712C-A	BNC U-Link Flexible Cable Type with Monitor	160.-
AD-3701CAP-CH	BNC U-Link Metal Type with Monitor	180.-
	SMB Connector	
CO-3107	SMB Female Straight 75 Ohm for Cable RG179	Call
CO-3109	SMB Female Right Angle 75 Ohm for Cable RG179	Call
CO-3113	SMB Male Straight 75 Ohm for Cable 2.5C-2V	Call
CO-3114	SMB Male Right Angle 75 Ohm for Cable 2.5C-2V	Call
	SAA 1.0/2.3 Connector	
CO-3207	SAA Push Pull 1.0/2.3 Female 75 Ohm for Cable RG179	Call
CO-3215	SAA Push Pull 1.0/2.3 Male 75 Ohm for Cable 2.5C-2V	Call
	DIN Connector	
CO-3316	DIN 1.6/5.6 Female Right Angle 75 Ohm for Cable 2.5C-2V	160.-
CO-3318	DIN 1.6/5.6 Male Right Angle 75 Ohm for Cable 2.5C-2V	160.-
	Coaxial Conector for Feeder Cable	
CO-3703	N Type Male Crimp Type 50 Ohm for RG8	160.-
CO-3706	N Type Female Crimp Type 50 Ohm for RG8	160.-
	F-Type Connector	
CO-F-M-TW-RG6	F-Type Connector Twisted Type Brass for RG6	5.-

TELECOM PRODUCT

COAXIAL CABLE

RG-6 Type

Applications :

RG 6 drop cable suitable for CATV/MATV, Broadband, HDTV and Satellite Broadcasting Transmission use. RG 6 can be used as a branch cable.

Standard Construction :

18 AWG [1.02mm (0.040 in.)] copper covered steel center conductor, gas expanded polyethylene dielectric, inner shield aluminum-polypropylene-aluminum laminated tape with overlap bonded to dielectric, outer shield of 34 AWG (0.16 mm) bare aluminum braid wire, jacket of black PVC (LSZH optional). Nominal outside diameter is 6.91 mm.(0.272 in.). Messenger Breaking Strength (Min) is 82 kgf.



Physical Dimensions:

Component	Standard		Shield		Tri-Shield		Quad-Shield	
	mm		inch		mm	inch	mm	inch
Nominal Center Conductor Diameter	1.02		0.040		1.02	0.040	1.02	0.040
Nominal Diameter Over Dielectric	4.57		0.180		4.57	0.180	4.57	0.180
Nominal Diameter Over First Shield (Tape)	4.75		0.187		4.75	0.187	4.75	0.187
Nominal Diameter Over Jacket	6.91		0.272		7.06	0.278	7.62	0.300
Nominal Jacket Wall Thickness	0.76		0.030		0.76	0.030	0.86	0.034
Nominal Diameter of Steel Messenger	1.30		0.051		1.30	0.051	1.30	0.051

RG-11 Type

Applications :

RG 11 drop cable suitable for CATV/MATV, Broadband, HDTV and Satellite Broadcasting Transmission use. RG 11 can be used as a trunk cable.

Standard Construction :

14 AWG [1.63mm (0.064 in.)] copper covered steel center conductor, gas expanded polyethylene dielectric, inner shield aluminum-polypropylene-aluminum laminated tape with overlap bonded to dielectric, outer shield of 34 AWG (0.16 mm) bare aluminum braid wire, jacket of black PVC (LSZH optional). Nominal outside diameter is 10.03 mm.(0.395 in.). Messenger Breaking Strength (Min) is 166 kgf.



Physical Dimensions:

Component	Standard		Shield		Tri-Shield		Quad-Shield	
	mm		inch		mm	inch	mm	inch
Nominal Center Conductor Diameter	1.63		0.064		1.63	0.064	1.63	0.064
Nominal Diameter Over Dielectric	7.11		0.280		7.11	0.280	7.11	0.280
Nominal Diameter Over First Shield (Tape)	7.29		0.287		7.29	0.287	7.29	0.287
Nominal Diameter Over Jacket	10.03		0.395		10.03	0.395	10.29	0.405
Nominal Jacket Wall Thickness	1.07		0.042		0.99	0.039	0.94	0.037
Nominal Diameter of Steel Messenger	1.83		0.072		1.83	0.072	1.83	0.072

TELECOM PRODUCT

COAXIAL CABLE

JIS Standard Coaxial Cables

Applications :

TV, Radio or phone receivers on automobile or ship, Car navigation system (GPS), Wiring inside telecommunications and electronic equipment such as portable phone.

50 & 75 Ohm PE Series

Standard Construction :

Solid or stranded, Copper or copper covered steel conductor, PE insulation, Bare copper braid shield 95% coverage.



Physical Dimensions:

Type	Conductor		Insulation		Shield	Jacket		Nom.Imp.	Nom.Capa.
	No/mm	Mtrl.	O.D.(mm)	Mtrl.		O.D.(mm)	Mtrl.	(Ω)	(1kHz) (pF/m)
1.5C-2V	1/0.26	BC	1.6	PE	95% BC Braid	2.9	PVC	75	69
2.5C-2V	1/0.40	BC	2.4	PE	95% BC Braid	4.0	PVC	75	69
1.5D-2V	7/0.18	BC	1.6	PE	95% BC Braid	2.9	PVC	50	100
2.5D-2V	1/0.80	BC	2.7	PE	95% BC Braid	4.3	PVC	50	100

Standard Attenuation @ 20˚C(dB/km)

Frequency	1.5C-2V	2.5C-2V	1.5D-2V	2.5D-2V
1 MHz	71	16	27	15
10 MHz	96	52	85	45
30 MHz	130	90	155	86
200 MHz	350	250	400	235

75 Ohm PE Series

Applications :

Interior lines for monitoring system, CCTV feeder lines, Wiring between the camera with control unit and video signal transmission.

Standard Construction :

Solid or stranded, Copper or copper covered steel conductor, PE insulation, Bare copper braid shield 95% coverage.



Type	Conductor		Insulation		Shield	Jacket		Nom.Imp.	Nom.Capa.
	No/mm	Mtrl.	O.D.(mm)	Mtrl.		O.D.(mm)	Mtrl.	(Ω)	(1kHz) (pF/m)
3C-2V	1/0.53	BC	3.1	PE	95% BC Braid	5.4	PVC	75	67
3C-2V.S	7/0.20	BC	3.1	PE	95% BC Braid	5.4	PVC	75	67
5C-2V	1/0.80	BC	4.9	PE	95% BC Braid	7.3	PVC	75	67
5C-2V.S	21/0.18	BC	4.9	PE	95% BC Braid	7.3	PVC	75	67
5C-2V.S-M	21/0.18	BC	4.9	PE	95% BC Braid	7.3x11.8	PVC	75	67
7C-2V.S	7/0.40	BC	7.3	PE	95% BC Braid	10.4	PVC	75	67
10C-2V.S	7/0.53	BC	9.5	PE	95% BC Braid	13.0	PVC	75	67

Standard Attenuation @ 20˚C(dB/km)

Frequency	3C-2V	3C-2V.S	5C-2V	5C-2V.S	7C-2V	7C-2V.S	10C-2V
1 MHz	13	15	8	9	5.5	7	4.4
10 MHz	43	48	27	31	18	22	16
30 MHz	75	84	47	55	32	38	27
200 MHz	200	230	126	150	90	105	76

TELECOM PRODUCT

DDF PANEL



DDF-19-32F



DDF-19-32D



DDF-19-32H



DDF-21-64F



DDF-21-32D



DDF-19-56H

General Specifications :

- Steel panel with epoxy powder coating
- Suitable for 19"/21" rack mount
- With TX/RX labels
- 2U high for 32 port and 3U high for 56/64 port
- 3 types to select flush plate, deep plate and hinged plate

PART NO.	DESCRIPTIONS	PRICE
DDF-19-32F	DDF Patch Panel 19" 32 Port Flush Mount Type	400.-
DDF-19-56F	DDF Patch Panel 19" 56 Port Flush Mount Type	520.-
DDF-21-32F	DDF Patch Panel 21" 32 Port Flush Mount Type	450.-
DDF-21-64F	DDF Patch Panel 21" 64 Port Flush Mount Type	750.-
DDF-19-32D	DDF Patch Panel 19" 32 Port Deep Mount Type	500.-
DDF-19-56D	DDF Patch Panel 19" 56 Port Deep Mount Type	850.-
DDF-21-32D	DDF Patch Panel 21" 32 Port Deep Mount Type	550.-
DDF-21-64D	DDF Patch Panel 21" 64 Port Deep Mount Type	900.-
DDF-19-32H	DDF Patch Panel 19" 32 Port Hinged Mount Type	720.-
DDF-19-56H	DDF Patch Panel 19" 56 Port Hinged Mount Type	820.-
DDF-21-32H	DDF Patch Panel 21" 32 Port Hinged Mount Type	800.-
DDF-21-64H	DDF Patch Panel 21" 64 Port Hinged Mount Type	900.-

TELECOM PRODUCT

BALUN 75/120 OHM



75/120 Ohm G.703 Balun Dual Port Converter



19" Balun Panel for 16 Dual Port

The 75/120 Ohm Balun Converter allows 75 Ohm TX/RX Coaxial Boutlet equipment to communicate with 120 Ohm twisted pair equipment. The Balun Converter can support E1 and transmission rate 2.048 Mbps.

General Specifications:

Balun Dual Port Converter (BNC75 Ohm/RJ45-120 Ohm)

Size	65W X 42D X 29H mm.
Weight	approximately 92g.
Power Supply	not necessary
Connector	75 Ohm female BNC connector
Connector	120 Ohm shielded Jack RJ45 connector (8P8C)

RJ45 Jack Pin Out

1	TX
2	TX
3	GND Shield
4	RX
5	RX
6	GND Opened

Balun Single Port Converter (IDC Type)

Power Supply	not necessary
Coaxial Connector	75 Ohm BNC, 1.6/5.6, 1.0/2.3 and Type 43
Copper Connection	120 Ohm Twisted Pair IDC Type



PART NO.	DESCRIPTIONS	PRICE
	Balun 75/120 Ohm	
BLRJ-D0F	75/120 Ohm G.703 Balun Adapter Dual Port Converter	700.-
BLPP-19-16P	Balun Panel 19" for 16 Dual Port	700.-
BLID-S1F	75/120 Ohm G.703 Balun 1.0/2.3 Female IDC	Call
BLID-S1M	75/120 Ohm G.703 Balun 1.0/2.3 Male IDC	Call
BLID-S3F	75/120 Ohm G.703 Balun Type 43 Female IDC	Call
BLID-S3M	75/120 Ohm G.703 Balun Type 43 Male IDC	Call
BLID-S0F	75/120 Ohm G.703 Balun BNC Female IDC	Call
BLID-S0M	75/120 Ohm G.703 Balun BNC Male IDC	Call
BLID-S2F	75/120 Ohm G.703 Balun 1.6/5.6 Female IDC	Call
BLID-S2M	75/120 Ohm G.703 Balun 1.6/5.6 Male IDC	Call

Telecom Accessories



RS-232 Male/Female



RJ11 (2, 4, 6 Pins)



Telephone Patch Cord



Telephone Modular Box (4, 6, 8 Pins)



Telephone Station Wire



Telephone Jumper Wire

AW Series : 19" Alfa Wall Rack



AW Series : 19" Alfa Wall Rack

AC Series : 19" Alfa Closed Rack



15U



27U



42U

TELECOM PRODUCT

RACK SYSTEM/WALL MOUNT RACK & CLOSED RACK

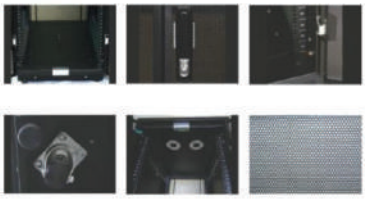
PART NO.	DESCRIPTIONS	PRICE
	19" Alfa Wall Rack	
AW-6406	19" Alfa Wall Rack 6U, 40 cm.	Call
AW-6409	19" Alfa Wall Rack 9U, 40 cm.	Call
AW-6412	19" Alfa Wall Rack12U, 40 cm.	Call
AW-6506	19" Alfa Wall Rack 6U, 50 cm.	Call
AW-6509	19" Alfa Wall Rack 9U, 50 cm.	Call
AW-6512	19" Alfa Wall Rack 12U, 50 cm.	Call
AW-6606	19" Alfa Wall Rack 6U, 60 cm.	Call
AW-6609	19" Alfa Wall Rack 9U, 60 cm.	Call
AW-6612	19" Alfa Wall Rack 12U, 60 cm.	Call
	19" Alfa Closed Rack	
AC-6615	19" Alfa Closed Rack 15U (60x60 cm.)	Call
AC-6627	19" Alfa Closed Rack 27U (60x60 cm.)	Call
AC-6636	19" Alfa Closed Rack 36U (60x60 cm.)	Call
AC-6639	19" Alfa Closed Rack 39U (60x60 cm.)	Call
AC-6642	19" Alfa Closed Rack 42U (60x60 cm.)	Call
AC-6645	19" Alfa Closed Rack 45U (60x60 cm.)	Call
AC-6815	19" Alfa Closed Rack 15U (60x80 cm.)	Call
AC-6827	19" Alfa Closed Rack 27U (60x80 cm.)	Call
AC-6836	19" Alfa Closed Rack 36U (60x80 cm.)	Call
AC-6839	19" Alfa Closed Rack 39U (60x80 cm.)	Call
AC-6842	19" Alfa Closed Rack 42U (60x80 cm.)	Call
AC-6845	19" Alfa Closed Rack 45U (60x80 cm.)	Call
AC-6927	19" Alfa Closed Rack 27U (60x90 cm.)	Call
AC-6942	19" Alfa Closed Rack 42U (60x90 cm.)	Call
AC-6042	19" Alfa Closed Rack 42U (60x100 cm.)	Call
AC-6127	19" Alfa Closed Rack 27U (60x110 cm.)	Call
AC-6045	19" Alfa Closed Rack 45U (60x100 cm.)	Call
AC-6142	19" Alfa Closed Rack 42U (60x110 cm.)	Call
AC-8842	19" Alfa Closed Rack 42U (80x80 cm.)	Call
AC-8827	19" Alfa Closed Rack 27U (80x80 cm.)	Call
AC-8845	19" Alfa Closed Rack 45U (80x80 cm.)	Call
AC-8942	19" Alfa Closed Rack 42U (80x90 cm.)	Call
AC-8042	19" Alfa Closed Rack 42U (80x100 cm.)	Call
AC-8142	19" Alfa Closed Rack 42U (80x110 cm.)	Call
AC-8145	19" Alfa Closed Rack 45U (80x110 cm.)	Call

ACC Series : 19" Alfa Curve Perforation Closed Rack

Illustration



Front View Side View Rear View





AC1/AC2 Series : 19" Alfa Perforation Closed Rack



Front View Side View Rear View

AC1 Series



Front View Side View Rear View

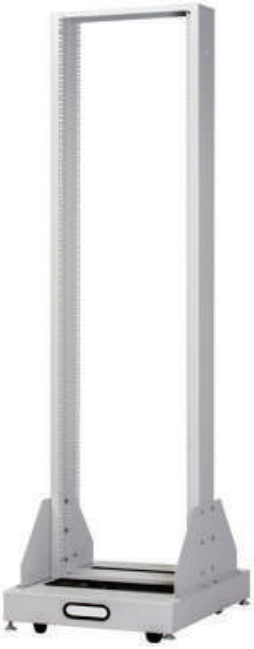
AC2 Series

TELECOM PRODUCT

PART NO.	DESCRIPTIONS	PRICE
	ACC : 19" Alfa Curve Perforation Closed Rack	
ACC-6042	ACC 19" Alfa Curve Perforation Closed Rack 42U (60x100 cm.)	Call
ACC-6142	ACC 19" Alfa Curve Perforation Closed Rack 42U (60x110 cm.)	Call
ACC-8042	ACC 19" Alfa Curve Perforation Closed Rack 42U (80x100 cm.)	Call
ACC-8142	ACC 19" Alfa Curve Perforation Closed Rack 42U (80x110 cm.)	Call
	AC1/AC2 : 19" Alfa Perforation Closed Rack	
AC1-6615	AC1 19" Alfa Perforation Closed Rack 15U (60x60 cm.)	Call
AC1-6627	AC1 19" Alfa Perforation Closed Rack 27U (60x60 cm.)	Call
AC1-6642	AC1 19" Alfa Perforation Closed Rack 42U (60x60 cm.)	Call
AC1-6815	AC1 19" Alfa Perforation Closed Rack 15U (60x80 cm.)	Call
AC1-6827	AC1 19" Alfa Perforation Closed Rack 27U (60x80 cm.)	Call
AC1-6842	AC1 19" Alfa Perforation Closed Rack 42U (60x80 cm.)	Call
AC1-6927	AC1 19" Alfa Perforation Closed Rack 27U (60x90 cm.)	Call
AC1-6942	AC1 19" Alfa Perforation Closed Rack 42U (60x90 cm.)	Call
AC1-6945	AC1 19" Alfa Perforation Closed Rack 45U (60x90 cm.)	Call
AC1-6027	AC2 19" Alfa Perforation Closed Rack 27U (60x100 cm.)	Call
AC1-6042	AC2 19" Alfa Perforation Closed Rack 42U (60x100 cm.)	Call
AC1-6045	AC2 19" Alfa Perforation Closed Rack 45U (60x100 cm.)	Call
AC2-6615	AC2 19" Alfa Perforation Closed Rack 15U (60x60 cm.)	Call
AC2-6627	AC2 19" Alfa Perforation Closed Rack 27U (60x60 cm.)	Call
AC2-6642	AC2 19" Alfa Perforation Closed Rack 42U (60x60 cm.)	Call
AC2-6815	AC2 19" Alfa Perforation Closed Rack 15U (60x80 cm.)	Call
AC2-6827	AC2 19" Alfa Perforation Closed Rack 27U (60x80 cm.)	Call
AC2-6842	AC2 19" Alfa Perforation Closed Rack 42U (60x80 cm.)	Call
AC2-6927	AC2 19" Alfa Perforation Closed Rack 27U (60x90 cm.)	Call
AC2-6942	AC2 19" Alfa Perforation Closed Rack 42U (60x90 cm.)	Call
AC2-6945	AC2 19" Alfa Perforation Closed Rack 45U (60x90 cm.)	Call
AC2-6027	AC2 19" Alfa Perforation Closed Rack 27U (60x100 cm.)	Call
AC2-6042	AC2 19" Alfa Perforation Closed Rack 42U (60x100 cm.)	Call
AC2-6045	AC2 19" Alfa Perforation Closed Rack 45U (60x100 cm.)	Call
AC2-6127	AC2 19" Alfa Perforation Closed Rack 27U (60x110 cm.)	Call
AC2-6142	AC2 19" Alfa Perforation Closed Rack 42U (60x110 cm.)	Call
AC2-6145	AC2 19" Alfa Perforation Closed Rack 45U (60x110 cm.)	Call
AC2-8842	AC2 19" Alfa Perforation Closed Rack 42U (80x80 cm.)	Call
AC2-8942	AC2 19" Alfa Perforation Closed Rack 42U (80x90 cm.)	Call
AC2-8045	AC2 19" Alfa Perforation Closed Rack 45U (80x100 cm.)	Call
AC2-8142	AC2 19" Alfa Perforation Closed Rack 42U (80x110 cm.)	Call
AC2-8145	AC2 19" Alfa Perforation Closed Rack 45U (80x110 cm.)	Call

AO Series : 19" Alfa Open Rack

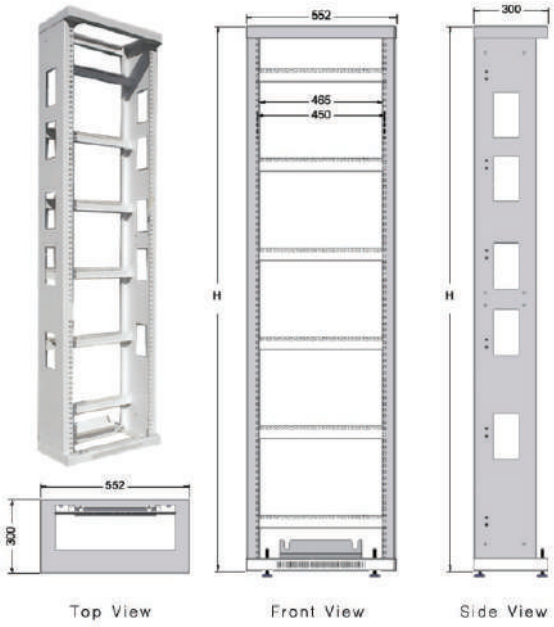
Illustration







AE Series : 19" Alfa ETSI Open Rack





TELECOM PRODUCT

RACK SYSTEM/OPEN RACK & DDF RACK

PART NO.	DESCRIPTIONS	PRICE
	19" Alfa Open Rack	
AO-6727	19" Alfa Open Rack 27U	Call
AO-6736	19" Alfa Open Rack 36U	Call
AO-6739	19" Alfa Open Rack 39U	Call
AO-6742	19" Alfa Open Rack 42U	Call
AO-6745	19" Alfa Open Rack 45U	Call
	19"/21" Alfa ETSI Open Rack	
AE-1918	19" Alfa ETSI Open Rack (1800H x 552W x 300D mm.)	Call
AE-1920	19" Alfa ETSI Open Rack (2000H x 552W x 300D mm.)	Call
AE-1922	19" Alfa ETSI Open Rack (2200H x 552W x 300D mm.)	Call
AE-2120	21" Alfa ETSI Open Rack (2000H x 600W x 300D mm.)	Call
AE-2122	21" Alfa ETSI Open Rack (2200H x 600W x 300D mm.)	Call

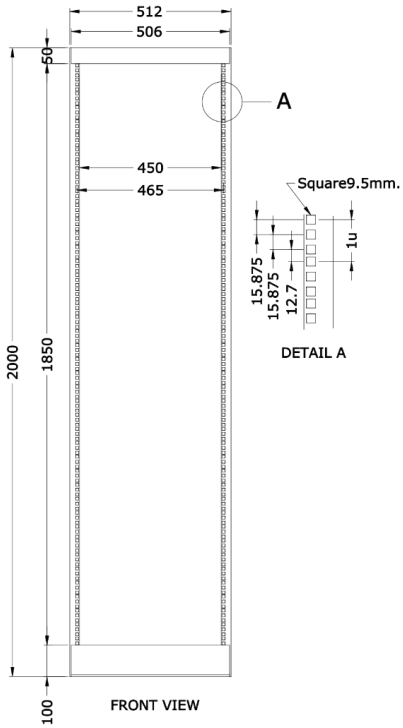
TIP

วิธีการเลือกรุ่น Rack System ต้องคำนึงถึงรายละเอียดดังต่อไปนี้

1. ความกว้าง (Width) ตามมาตรฐานแล้ว ความกว้างของตู้ Rack 19"/21" และ 23" จะนับจากขอบด้านนอกของตู้ Rack จากซ้ายไปขวา ซึ่งจะมีขนาดเท่ากับ 60 ซม. ส่วนเนื้อที่ที่จะใช้งานได้จริงจะนับจากขอบเสาที่ใช้ยึดกับอุปกรณ์ด้านในตู้ Rack โดยจะมีความกว้างเท่ากับ 45.15 ซม.
2. ความลึก (Depth) ความลึกของตู้ Rack มีดังต่อไปนี้
- รุ่นติดผนัง Wall Rack มีความลึกที่ 40 ซม., 50 ซม. และ 60 ซม.
- รุ่นตั้งพื้น Close Rack มีความลึกที่ 60 ซม., 80 ซม., 90 ซม., 100 ซม. และ 110 ซม.
3. ความสูง (Height) หน่วยความสูงของตู้ Rack จะเรียกว่า U ซึ่ง 1U = 4.45 ซม. หรือ 1.75 นิ้ว
- รุ่นติดผนัง Wall Rack มีความสูงมาตรฐานทั่วไป 6U, 9U และ 12U หรือความสูงสั่งทำพิเศษ เช่น 15U
- รุ่นตั้งพื้น Close Rack มีความสูงมาตรฐานทั่วไป 15U, 27U, 36U, 42U และ 45U หรือความสูงสั่งทำพิเศษ เช่น 48U
4. สีของตู้มาตรฐานทั่วไปจะเป็นสี Gray หรือ Option สีดำ







Rack Accessories



Ventilating Fan



AC Power Distribution



Fix Shelf



Front Mounted Shelf



Slide Shelf



Chassis Guide



Blank Panel



Cable Management Panel 19" 5 Metal Rings



Cable Management Panel 19" 1U with Cover



Lighting Set PL 7w.



Vertical Ring



Cage Nut Set



Joint Kit



Support for Shelf
(Close Rack)



Support for Shelf
(Open Rack)

TELECOM PRODUCT

RACK SYSTEM / RACK ACCESSORIES

PART NO.	DESCRIPTIONS	PRICE
	Accessories	
PA-6604	AC Power Distribution 4 Universal Outlet with Cable 1.5 M.	Call
PA-6606	AC Power Distribution 6 Universal Outlet with Cable 3 M.	Call
PA-6608	AC Power Distribution 8 Universal Outlet with Cable 3 M.	Call
PA-6612	AC Power Distribution 12 Universal Outlet with Cable 3 M.	Call
PA-6612 B/R	30 Amp Power Distribution 12 Outlet W/Power Plug, Cable 3 M & Protection	Call
PA-6620	AC Power Distribution 20 Universal Outlet with Cable 3 M.	Call
PA-6620 B/R	30 Amp Power Distribution 20 Outlet W/Power Plug, Cable 3 M & Protection	Call
VA-6601	Ventilating Fan 1 x 4" with Plate (Heavy Duty)	Call
VA-6602	Ventilating Fan 2 x 4" with Plate (Heavy Duty)	Call
VA-6603	Ventilating Fan 3 x 4" with Plate (Heavy Duty)	Call
CA-6601	Cable Management Panel 19" 5 Metal Rings	Call
CA-6602	Cable Management Panel 19" 1U with Cover	Call
RA-6603	Vertical Ring	Call
FA-6745	Fix Shelf (Open Rack)	Call
SA-6745	Slide Shelf (Open Rack)	Call
FA-6430	Fix Wall Rack 30 cm. Depth	Call
FA-6645	Fix Shelf 45 cm. Depth	Call
FA-6660	Fix Shelf 60 cm Depth	Call
FA-6675	Fix Shelf 75 cm. Depth	Call
FA-6680	Fix Shelf 80 cm. Depth	Call
FA-6695	Fix Shelf 95 cm. Depth	Call
SA-6645	Slide Shelf 45 cm. Depth	Call
SA-6660	Slide Shelf 60 cm. Depth	Call
SA-6675	Slide Shelf 75 cm. Depth	Call
SA-6680	Slide Shelf 80 cm. Depth	Call
SA-6695	Slide Shelf 95 cm. Depth	Call
BA-6601	Blank Panel Size 1U	Call
BA-6602	Blank Panel Size 2U	Call
BA-6603	Blank Panel Size 3U	Call
BA-6604	Blank Panel Size 4U	Call
BA-6605	Blank Panel Size 5U	Call
BA-6606	Blank Panel Size 6U	Call
BA-6607	Blank Panel Size 7U	Call
BA-6608	Blank Panel Size 8U	Call
NA-6601	Cage Nut (น๊อต U ยึดอุปกรณ์)	Call





POWER SUPPLY







POWER SUPPLY

SWITCHEDMODE POWER SUPPLY/DC SWITCHEDMODE RECTIFIER SYSTEM

CXPS-E101



48Vdc Power System 100A - 225A

Features :

- Integrated 48V power system packages in 100A or 225A configurations
- Ultra compact, high density design utilizing standard plug-in circuit breakers
- High efficiency design for reduced operating expenses
- High temperature rated, fan-cooled design for harsh outdoor installations
- Wide range AC input and IEC line cords for multiple AC services

CXPS-E3



48Vdc Power System 400A

Features :

- Integrated -48V, 400A power system with front access distribution
- Industry leading power system density
- 400A, up to 26 distribution positions in 5RU
- Advanced CXC-HP controller with touch screen display for full local control
- High temperature rated design for harsh outdoor applications
- Wide range AC input for flexible worldwide deployment

Cordex™ 650W

Features :

- Multiple 48V configurations up to 67A for various 48Vdc applications
- Convection cooled design for high reliability in harsh industrial environments
- Front access options for space restricted enclosures
- Integrated DC system capability with controller and distribution module options



48Vdc Power System 52A - 67A



48Vdc Modular Switched Mode Rectifier

POWER SUPPLY

SWITCHEDMODE POWER SUPPLY/DC SWITCHEDMODE RECTIFIER SYSTEM



48Vdc Power System 75A - 100A



48Vdc Modular Switched Mode Rectifier

Cordex™ HP 1.2kW System

Features :

- Multiple 48V configurations up to 100A for various 48Vdc applications
- High efficiency design for reduced operating expenses
- High temperature rated fan-cooled design for harsh outdoor installations
- Wide range AC input and IEC line cords for multiple AC services
- Front access options for space restricted enclosures



48Vdc Power System 250A - 312A



Modular Switched Mode Rectifier

Cordex HP™ 3.0kW System

Features :

- High efficiency (>96%) for reduced OPEX and carbon footprint
- High temperature operating range for installation in non-controlled environments
- Multiple 48V configurations up to 312A in a compact 1RU shelf system
- Industry leading power density (28W/in) yields more space for revenue generating equipment
- Wide AC input operating range for global installation requirements

3



125/220V High Voltage Integrated Systems



125Vdc Modular Switched Mode Rectifier

Cordex™ 1.1kW System

Features :

- 125/220Vdc 3.3kW capacity solution for industrial and utility applications
- Convection cooled design for high reliability in industrial environments
- Wide range AC input for multiple worldwide AC services
- Integrated system solution with CXC controller and distribution

POWER SUPPLY

SWITCHEDMODE POWER SUPPLY/SYSTEM CONTROL

Cordex™ CXCI HP



System Controller Cordex™ CXCI HP

Features :

- Modular, hot swappable controller for use with Alpha's Cordex 2U rectifier, converter and line powering platforms
- Advanced next-generation control and monitoring platform for Alpha's Cordex product family
- Integrated USB host for local firmware upgrades, configuration updates and system backup/restoration
- Seamless integration of multiple energy systems allowing comprehensive management, monitoring and control
- Integrated OLED display with numerous features including local software upgrades and system backup/restore

Cordex™ CXCM1 HP



System Controller Cordex™ CXCM1 HP

Features :

- Modular, hot swappable controller for use with Alpha's HP 1.2kW rectifier platform
- Advanced next-generation control and monitoring platform for Alpha's Cordex product family
- Integrated USB host for local firmware upgrades, configuration updates and system backup/ restoration
- Seamless integration of multiple energy systems allowing comprehensive management, monitoring and control
- Integrated OLED display with numerous features including local monitoring and configuration management

Cordex™ CXC HP



System Controller Cordex™ CXC HP

Features :

- Advanced next-generation control and monitoring platform for Alpha's Cordex product family
- High resolution color touchscreen LCD display with advanced local UI
- Integrated USB host for local firmware upgrades, configuration updates and system backup/restoration
- Comprehensive graphical user interface for advanced system configuration
- Seamless integration of multiple energy systems allowing comprehensive management, monitoring and control
- External ADIO peripherals for customizing unique I/O configurations
- Compact flexible mounting options to reduce space requirements

POWER SUPPLY

CONVERTER SYSTEM AND STAND ALONE INVERTER

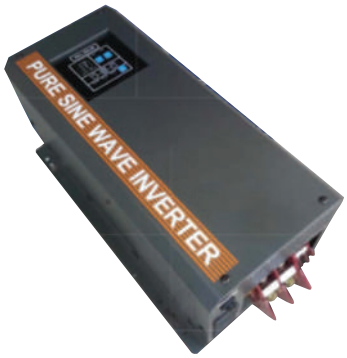


DC-DC Converter System

DC CONVERTER SYSTEM
CXPS 24→48-i & CXPS 48→24-i

Features :

- Integrated 8kW capacity converter system with front access distribution
- Support for small to medium 48Vdc loads from a legacy 24V power system or 24Vdc loads from 48V power system
- Integrated Cordex CXCI HP for advanced local and remote monitoring and control
- Internal low voltage shutdown for cost effective integration into existing systems
- Universal 19"/23" mounting for flexible installation options into existing racks



STAND ALONE INVERTER
Stand Alone Inverter

Features :

- Microcontroller technology designs
- Isolation transformer & double conversion technology
- High efficiency, high performance and high reliability
- Full time operating with 24 hours running
- Automatic low DC input shutdown protection
- DC input reverse polarity protection
- Output short circuit and over load protections
- Automatic DC start
- Remote control cable (option)
- Each inverter model has different output power as below
  - 1000VA/1000W
  - 1500VA/1500W
  - 2000VA/2000W
  - 3500VA/3500W
  - 5000VA/5000W



Stand Alone Inverter Rack Mount

Features :

- Microcontroller technology designs
- Isolation transformer & double conversion technology
- High efficiency, high performance and high reliability
- Full time operating with 24 hours running
- Automatic low DC input shutdown protection
- DC input reverse polarity protection
- Output short circuit and over load protections
- Automatic DC start
- Each inverter model has different output power as below
  - 1000VA/1000W
  - 1500VA/1500W
  - 2000VA/2000W

POWER SUPPLY

OUTDOOR UPS SYSTEM WITH ENCLOSURE



UPS and Enclosure

Micro 350

Micro 350

Features :

- Integrated backup power system designed to operate in extreme environments and provide maximum flexibility while ensuring critical loads remain up and running during power outages
- 350W/VA total output in AC and/or DC including 120Vac, 24Vac, 48Vdc, 24Vdc and 12Vdc enables application with diverse load requirements
- Temperature compensated battery charging provides longer battery life
- Wide range of input with Automatic Voltage Regulation (AVR) extends battery life by not reverting to batteries during periods of surge or sag in utility power voltage
- External communication via USB port and Ethernet SNMP interface provides local or remote monitoring and control



Outdoor UPS System

Micro 1000

Micro 1000

Features :

- Compact, integrated UPS system provides clean, uninterruptable backup power
- Wide range Automatic Voltage Regulation without going to batteries extends battery life, even during periods of surge or sag in voltage from utility power
- External communications via RS-323 port or (optional) Ethernet SNMP interface provides local or remote monitoring control
- Independently programmable control and report relays allow tracking and controlling of key functions
- Event and alarm logging with time and date stamping simplifies and accelerates troubleshooting
- A wide operating temperature range of -40 to 74°C (-40 to 165°F) is suitable for most extreme operating environments
- Temperature compensated battery charging protects batteries from overcharging/ undercharging at extreme temperatures

POWER SUPPLY

19" RACK MOUNT OUTDOOR UPS

ALFA BASE Communication

Application for CCTV, Traffic, Security, Parking

FXM HP 650



Rugged UPS Module FXM HP 650

Features :

- 650W/VA UPS module designed to operate in extreme environments and provide maximum flexibility while ensuring critical loads remain protected and running during power outages and other power disturbances
- Wide range Automatic Voltage Regulation (AVR) lengthens battery life by providing without transferring to backup mode during voltage surge or sag
- Independently programmable control and report dry contacts allow monitoring and controlling of key functions
- Temperature compensated battery charging protects batteries from overcharging or undercharging at extreme temperatures, extending the life of the battery
- Local and remote monitoring and control via Ethernet SNMP interface

FXM HP 1100



Rugged UPS Module FXM HP 1100

Features :

- 1100W/VA UPS module designed to operate in extreme environments and provide maximum flexibility while ensuring critical loads remain protected and running during power outages and other power disturbances
- Wide range Automatic Voltage Regulation (AVR) lengthens battery life by providing protection without transferring to backup mode during voltage surge or sag
- Independently programmable control and report dry contacts allow monitoring and controlling of key functions
- Temperature compensated battery charging protects batteries from overcharging or undercharging at extreme temperatures, extending the life of the battery
- Local and remote monitoring and control via Ethernet SNMP interface
- UPS panels can be rotated, improving usability and viewing convenience

FXM HP 2000



Rugged UPS Module FXM HP 2000

Features :

- 2000W/VA UPS module designed to operate in extreme environments and provide maximum flexibility while ensuring critical loads remain protected and running during power outages and other power disturbances
- Wide range Automatic Voltage Regulation (AVR) lengthens battery life by providing protection without transferring to backup mode during voltage surge or sag
- Independently programmable control and report dry contacts allow monitoring and controlling of key functions
- Temperature compensated battery charging protects batteries from overcharging or undercharging at extreme temperatures, extending the life of the battery
- Local and remote monitoring and control via Ethernet SNMP interface
- UPS panels can be rotated, improving usability and viewing convenience

POWER SUPPLY

DESKTOP POWER SUPPLY

Desktop Power Supply

- AC / DC Power Supply
- AC / DC Power Supply with Charger
- DC / DC Converter

Specifications :

- Stand-alone Unit
- Application for modem, router, ADSL, DSLAM, broadband, CATV, fire alarm, instruments
- High reliability
- EMI filter
- Over load, short circuit protections
- ISO 9001:2000

AC / DC Switchedmode Power Supply

- Input 110/220 Vac
- Output 5, 12, 24, 48 Vdc
- Power 25 - 1,000 Watt

DC / DC Switchedmode Power Supply

- Input 12, 24, 48 Vdc
- Output 5, 12, 24, 48 Vdc
- Power 20 - 200 Watt



25-50W Single Output Series



100-300W Single Output Series



350W Single Output Series



500W Single Mini-size Series



800-1000W Single mini-size Series



120W Single DIN Rail Series

POWER SUPPLY

SURGE PROTECTION DEVICE

AC Surge Protection

Applications :

- Entrance Building
- Factory
- Computer System
- Machine

Type of AC Surge Protections :

- Single Phase 220 Vac / 50 Hz
- Three Phase 220/380 Vac / 50 Hz
- Active Tracking Power Line Filter



Single Phase



Three Phase



Power Line Filter



AC DIN Rail Surge

Signal Surge Protection

- Antenna Series N-Type, TNC, BNC
- Ethernet LAN Series RJ45 10/100, 10/100/1000
- RS-232 Series; DB9, DB15, DB25



10/100/1000 Ethernet



Coaxial N-Type, TNC



Coaxial BNC Type



10/100/100 PoE Ethernet



DB25



DB9

POWER SUPPLY

POWER DISTRIBUTION UNIT (PDU)

Power Distribution Unit with Bus Bars



PDU 19" Rack Mount 3U, 1 Channel

2 Bus Bar with Tin Plated, Gray with Front Cover and Top Acrylic

P/N : PDU-19-S1-B2-GR

Features :

- Can be used for both AC and DC systems
- Steel cabinet rack mount with see through hinged front acrylic cover of circuit breakers
- Designed for DIN rail circuit breakers both 1 pole and 2 pole
- Support up to 22 of 1 pole DIN rail circuit breaker
- Equipped with copper tin plated bus bar support up to 230 A*
- Dark gray color for standard product
- Top acrylic cover for protection and safety
- Nice shape, easy installment and tool-less maintenance
- Suitable for 19"/21" standard rack and convenient for operation

*Size 30 mm in width and 5 mm in thickness



PDU 19" Rack Mount 3U, 2 Channels

3 Bus Bar with Tin Plated, Gray with Front Cover and Top Acrylic

P/N : PDU-19-S2-B3-GR

Features :

- Can be used for both AC and DC systems
- Steel cabinet rack mount with see through hinged front acrylic cover of circuit breakers
- Designed for DIN rail circuit breakers both 1 pole and 2 pole
- Support up to 11 of 1 pole DIN rail circuit breaker for each channel
- Equipped with three copper tin plated bus bar support up to 230 A* and separate channel A and channel B
- Dark gray color for standard product
- Top acrylic cover for protection and safety
- Nice shape, easy installment and tool-less maintenance
- Suitable for 19"/21" standard rack and convenient for operation

*Size 30 mm in width and 5 mm in thickness



PDU 19" Rack Mount 3U, 2 Channels

4 Bus Bar with Tin Plated, Gray with Front Cover and Top Acrylic

P/N : PDU-19-S2-B4-GR

Features :

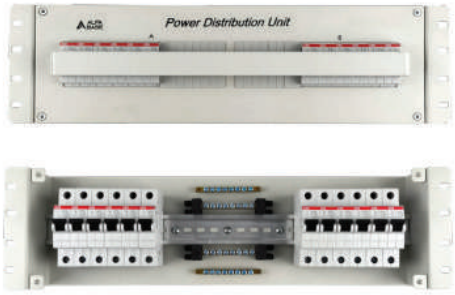
- Can be used for both AC and DC systems
- Steel cabinet rack mount with see through hinged front acrylic cover of circuit breakers
- Designed for DIN rail circuit breakers both 1 pole and 2 pole
- Support up to 11 of 1 pole DIN rail circuit breaker for each channel
- Equipped with four copper tin plated bus bar support up to 230 A* and separate channel A and channel B
- Dark gray color for standard product
- Top acrylic cover for protection and safety
- Nice shape, easy installment and tool-less maintenance
- Suitable for 19"/21" standard rack and convenient for operation

*Size 30 mm in width and 5 mm in thickness

POWER SUPPLY

POWER DISTRIBUTION UNIT (PDU)

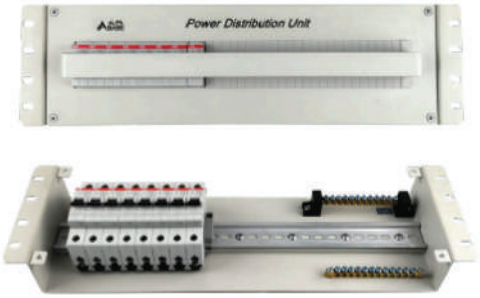
Power Distribution Unit with Terminal Bars



PDU 19" Rack Mount 3U, 2 Channels
with Terminal Bar, Light Gray
P/N : PDU-19-S2-TMN-LG

Features :

- Can be used for both AC and DC systems
- Steel cabinet rack mount 3U
- Designed for DIN rail circuit breakers both 1 pole and 2 pole
- Four terminal bar 8P for common and ground connection
- Terminal bar support 63 A current (max) and cable size 10 sq.mm
- Support 6 of 1 pole DIN rail circuit breaker for each channel
- Support up to 10 of 1 pole DIN rail circuit breaker for each channel if removed all terminal bar
- Front steel bar protect circuit breaker
- Nice shape, easy installment and maintenance
- Suitable for 19" standard rack and convenient for operation
- Light gray color for standard product and other colors as optional



PDU 19" Rack Mount 3U, 1 Channel
with Terminal Bar, Light Gray
P/N : PDU-19-S1-TMN-LG

Features :

- Can be used for both AC and DC systems
- Steel cabinet rack mount 3U
- Designed for DIN rail circuit breakers both 1 pole and 2 pole
- Two terminal bar 12P for common and ground connection
- Terminal bar support 63 A current (max) and cable size 10 sq.mm
- Support 14 of 1 pole DIN rail circuit breaker
- Support up to 20 of 1 pole DIN rail circuit breaker if removed two terminal bar
- Front steel bar protect circuit breaker
- Nice shape, easy installment and maintenance
- Suitable for 19" standard rack and convenient for operation
- Light gray color for standard product and other colors as optional

PDU Accessories



Comb Bar
P/N : ABB-BUS



Blank Plate 6 Modules
P/N : ABB-PLATE



DIN Rail Stopper
P/N : TBR-F



Acrylic Top & Rear Cover
P/N : PDU-COVER

POWER SUPPLY

POWER DISTRIBUTION UNIT (PDU)

Ground Bar



Mini Tinned Ground Bar
P/N : GB-MN-T



Mini Ground Bar
P/N : GB-MN



Tinned Ground Bar
for Rack 19"
P/N : GB-R19-T



Ground Bar
for Rack 19"
P/N : GB-R19

PART NO.	DESCRIPTIONS	PRICE
	Power Distribution Unit (PDU)	
PDU-19-S1-B2-GR	PDU 19" Rack Mount 3U, 1 Channel 2 Bus Bar with Tin Plated, Gray with Acrylic Cover "AILFA BASE"	4,500.-
PDU-19-S2-B3-GR	PDU 19" Rack Mount 3U, 2 Channels 3 Bus Bar with Tin Plated, Gray with Acrylic Cover "AILFA BASE"	4,500.-
PDU-19-S2-B4-GR	PDU 19" Rack Mount 3U, 2 Channels 4 Bus Bar with Tin Plated, Gray with Acrylic Cover "AILFA BASE"	4,500.-
PDU-19-S1-TMN-LG	PDU 19" Rack Mount 3U, 1 Channel with Terminal Bar, Light Gray "AILFA BASE"	2,600.-
PDU-19-S2-TMN-LG	PDU 19" Rack Mount 3U, 2 Channels with Terminal Bar, Light Gray "AILFA BASE"	2,900.-
	PDU Accessories	
ABB-PLATE	Blank Plate 6 Modules	100.-
TBR-F	DIN Rail Stopper	13.-
PDU-COVER	Acrylic Top & Rear Cover	400.-
ABB-BUS-06	Comb Bar 6 Pin	90.-
ABB-BUS-19	Comb Bar 19 Pin	180.-
	Mini Ground Bar	
GB-MN-T	Mini Tinned Ground Bar	420
GB-MN	Mini Ground Bar	390
	Ground Bar for Rack 19"	
GB-R19-T	Tinned Ground Bar for Rack 19"	820
GB-R19	Ground Bar for Rack 19"	800

POWER SUPPLY

CIRCUIT BREAKER

ABB Circuit Breaker



ABB DIN Rail
Miniature Circuit Breaker (MCBs)



ABB DIN Rail
Residual Current Devices (RCDs)

Schneider Electric Circuit Breaker



Schneider DIN Rail
Miniature Circuit Breaker (MCBs)



Schneider DIN Rail
Residual Current Devices (RCDs)

POWER SUPPLY

BATTERY/NICKEL CADMIUM BATTERY

Nickel Cadmium Batteries Sintered Plate/Pocket Plate
5AH to 100AH/20+ years long life

Nickel Cadmium cells using sintered plate/pocker plate technology have been used successfully in industrial battery applications for long years. With a design life of more than 20 years, they have proved to be a very reliable DC power source in float service or cyclic application in harsh conditions with temperatures up to 60°C



Nickel Cadmium Batteries

Features :

- Excellent high rate discharge performance
- 20+ years long service life
- Wide operating temperature range
- Lowest self-discharge
- Resistance to mechanical and electrical abuse
- Absolute reliability

Specifications :

- Container: Translucent plastic or steel
- Terminal Seal: Compressed O-Ring
- Internal Connectors: Plated Copper Bar
- Plates: Sintered / Pocket plates
- Electrolyte: Potassium Hydroxide 1.19~1.2kg/l

Float Voltage :

- GNC Type: 1.38~1.40 VPC
- GNC/GNZ Type: 1.42~1.45 VPC
- GN Type: 1.48~1.50 VPC

Boost/Equalize Charge
- GNC Type: 1.46~1.48 VPC
- GNC/GNZ/GN Type: 1.55~1.60 VPC
- Temperature Range: -20 °C to +60 °C

General Applications :

Battery Model	Discharge Performance	Plate Type Ultra	Applications
GNC Series	Ultra High Discharge Rate	Sintered Plate	- AGV, gas turbine generation, engine starting, operating/control of computer systems, transportation networks, airport, etc.
GNG Series	High Discharge Rate	Pocket Plate	- Engine starting, UPS (up to 30 minutes), operation and control of DC motor, water treatment plants, etc.
GNZ Series	Medium Discharge Rate	Pocket Plate	- UPS (over 30 minutes), railway DC power sources, auxilliary power sources for power stations, chemical plants, oil refineries, iron works etc.
GN Series	Low Discharge Rate	Pocket Plate	- Emergency lighting, telecommunications, operation of communication equipment on a ship lighting, air conditioner control on a train, etc.

POWER SUPPLY

BATTERY/STATIONARY BATTERIES

Stationary Battery

Applications :

- Telecommunication
- UPS
- Solar Cell
- Industrial
- Emergency Light
- Power Station

Type of Battery :

- VRLA Battery
- GEL Battery
- AGM Battery
- Vented Lead Acid Battery
- Modular Type Battery
- Front Terminal Battery



Gel 50 - 300 Ah



Solar 30 - 250 Ah



VRLA 200 - 3000 Ah



Lead Acid 100 - 3000 Ah



AGM VRLA 7 - 250 Ah



Modular VRLA 200 - 3000 Ah

POWER SUPPLY

BATTERY/STATIONARY BATTERIES

Stationary Battery

Applications :

- Telecommunication
- UPS
- Solar Cell
- Industrial
- Emergency Light
- Power Station

Type of Battery :

- VRLA Battery
- GEL Battery
- AGM Battery
- Vented Lead Acid Battery
- Modular Type Battery
- Front Terminal Battery



Power Safe Front Terminal V-FT Series
VRLA 31-190 Ah



Data Safe HX Series
VRLA 72-235 Ah



GAZ Ni - Cd KL Series
Low Rate Discharge 11-1700 Ah



Genesis NP/NPX Series
VRLA 1-200 Ah



Power Safe OPzV DIN Series
VRLA Tubular 215-3170 Ah



Power Safe OPzS DIN Series
Tubular 216-3360 Ah



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Communication

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