

MODULAR PRODUCTS

PRODUCT RANGE

- RJ45, RJ12, RJ11 - Shielded & Unshielded
- Gang Jacks, Low Profile Jacks with Lightpipe Switching Jacks
- Patchcords – Category 5e/6 Shielded (STP) & Unshielded
- Long and Short body plugs
- Surface Mount Devices with spring loaded shutters
- 110 series Wiring Kits
- Patch Panels



F. 1 - Unshielded Cat5e patchcord



F. 2 - Unshielded Cat6 patchcord

F. 3 – Unshielded Cat6 Patch Panel



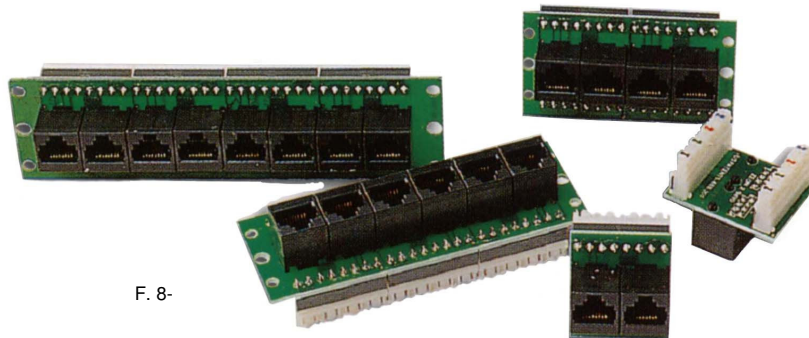
F. 4 – Unshielded Cat5e Patch Panel



F. 5 – Unshielded Cat5e Keystone Jack

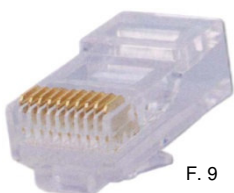


F. 6 – Unshielded Cat6 Keystone Jack

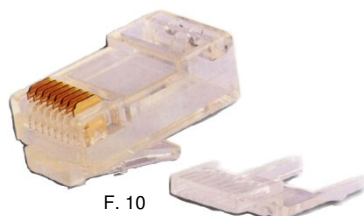


F. 8-

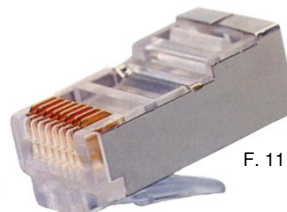
RJ45 Plugs



F. 9



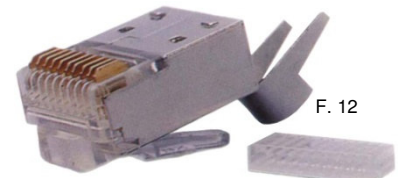
F. 10



F. 11



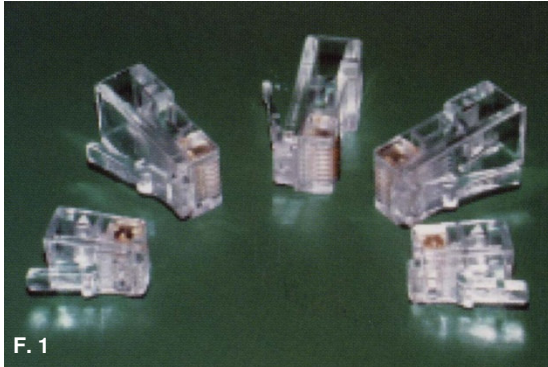
F. 7- Crimping Tool



F. 12

Modular Connectors (RJ11, RJ12, RJ45)

Modular Plugs



- FCC 68 4x2, 4x4, 6x2, 6x4, 6x6, 8x4, 8x6, 8x8, 10x10 and 12 position
- FCC 68 Short Body or Long Body
- Shielded or Unshielded

Specifications

Material and Finish

Housing: Poly carbonate (PC)
 Contacts: Copper Alloy Selective
 Gold Over Nickel Plate

Mechanical

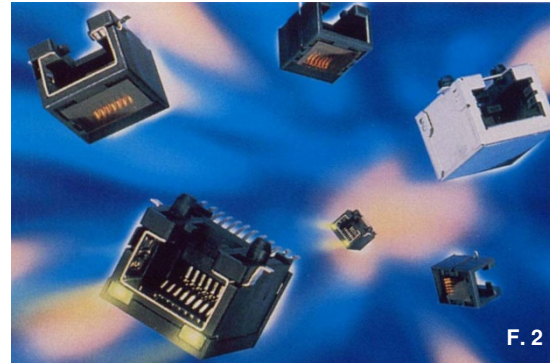
Cable-to-Plug Tensile Strength: 20Lbs min
 Durability 750 Cycles min

Electrical

Rated Voltage, Current: 30 VAC at 1.5 A
 Contact Resistance: 10 mOhms max
 Dielectric Strength: 1000 VAC (RMS)
 Insulation Resistance: 500 mOhms
 Operating Temperature: -20°C to +80°C

Please contact Photonix for other options

Modular Jacks



Specifications – RJ11, RJ12, RJ45

Circuit sizes offered 4/2, 4/4, 6/2, 6/4, 6/6, 8/2, 8/4, 8/6, 8/8, 8/10, 10/10 (Shielded & Unshielded)

Electrical

Voltage 125V
 Current 1.5A
 Contact Resistance 10-20mOhm max.
 Dielectric Withstanding Voltage 1000V
 Insulation Resistance 500mOhm min.
 Shielded Effectiveness (if applicable) 20dB min.

Physical

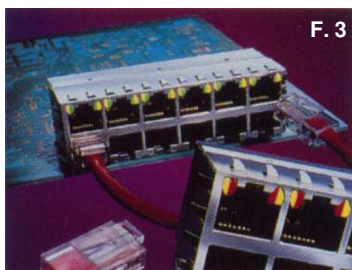
Contact Phosphor bronze
 Housing Polyester, High Temperature
 Nylon, Polyamide, various colours
 Temperature -40° to +80°C
 Contact area plating 1.27µm (50µ") min. gold
 Mates with FCC 68 plugs

Ordering Information:

PX-E02XX1 – RJ45 (8x8) Plug Unshielded
 PX-E02XX3 – RJ45 (8x8) Plug Unshielded
 PX-E02XX2 – RJ45 Boots Blue

Modular Jacks with Lightpipes

(Reduce EMI/RFI by 50%)
 Circuit sizes offered 6/4, 6/6, 8/8 – shielded & unshielded)



Electrical

Voltage 125V
 Current 1.5A max.
 Contact Resistance 10mW max.
 Dielectric Withstanding Voltage 1000V AC
 Insulation Resistance 500 MW min.

Mechanical

Durability 500 cycles

Physical

Housing Black glass-filled, High temp nylon, UL94V-0
 Contact area 1.27µm (50µ") min. Gold
 Solder tails 1.27µm (50µ") Tin/Lead on both contact area & solder tails over nickel overall
 Temperature -40°C to +80°C
 Mates with FCC 68 plugs

Modular Connectors

Modular Connectors

Modular Jacks Cat 5e/6 for LAN requirements. Circuit sizes offered 8/8 – shielded and unshielded

Electrical

Voltage	125V
Current	1.5A
Contact Resistance	20 mOhm max.
Dielectric Withstanding Voltage	1000V
Insulation Resistance	500 mOhm min.

Mechanical

Durability	500 cycles
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Physical

Housing	Black polyester, UL94V-0
Contact	Phosphor bronze
Plating	Post plate 1.27 to 1.52µm (50 to 60µ") gold in contact area, 1.90µm/(90/10) tin/lead in tail area both over 1.27µm (50µ") min. nickel overall. Note 0.38µm/(15µ") and 0.76µm/(30µ") gold plating also available
Shielded Effectiveness (shielded plugs only)	20dB min.
Temperature	-40 °C to +80 °C
Mates with Cat 5e/6 Plug EIA/TIA 568 B requirements (100Mbps/s)	

Category	Test Frequency	Cable Attenuation	Cable NEXT Jack/	Plug Attenuation	Jack/Plug NEXT
3	16MHz			<0.4dB	>34dB
4	20MHz			<0.3dB	>44dB
5e	100MHz	<22dB	>32dB	<0.3dB	>40dB
6	100MHz/300MHz /600MHz	<19dB/<33dB/ <50dB	>70dB/>60dB/ >60dB	<0.2dB/<0.3dB/ <0.3dB	>70dB*/>60dB*/ >60dB

* Note, restricted to 1/2 & 7/8 dual twisted pairs ** NEXT – Near End Crosstalk

Modular Jack Products (PX-E02 Series)

High-Speed, Right Angle

- a. Low Profile
- b. Low Profile, Internal Shield
- c. Low Profile, Shielded
- d. Low Profile, Shielded & Unshielded
- e. Ganged, Right Angle Low Profile, Shielded & Unshielded versions

SMT, Right Angle

- a. Low Profile with Outboard Fitting Nails
- b. Low Profile with Flush Fitting Nails
- c. Right Angle Low Profile
- d. Low Profile with Locating Pin
- e. Low Profile
- f. Low Profile, Internal Shield
- g. Low Profile Dual Ports with Outboard Fitting Nails
- h. SMT, Right Angle Low Profile Dual Port with flush Fittings Nails

Right Angle

- a. Low Profile Shielded and Unshielded versions
- b. Low Profile
- c. Low Profile, Internal Shield
- d. Low Profile, Internal Shield, Keyed
- e. Ganged, Low Profile, Shielded and Unshielded versions
- f. Standard Profile, Shielded
- g. Standard Profile Flush Mount
- h. Standard Profile Flush Mount
- i. Standard Profile Flangeless
- j. Standard Profile Flange Mount

- k. Standard Profile with metal peg
- l. Right Angle, Inverted Standard Profile
- m. Right Angle, Low Profile Inverted, Dual Port
- n. Low Profile Inverted, Shielded & Unshielded versions
- o. Low Profile Inverted Shielded and Unshielded versions with Lightpipes
- p. Low Profile Inverted Shielded version with High Temperature Lightpipes

High Speed, Vertical

- a. Standard Profile with small Panel Cutout
- b. Standard Profile
- c. Standard Profile, Shielded

SMT, Vertical

- a. Standard Profile with small Panel Cutout
- b. Standard Profile with small Panel Cutout & Locating Pins
- c. Standard Profile with small Panel Cutout

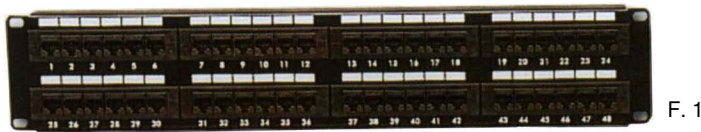
Vertical

- a. Low Profile for 0.062 and 0.125" PCB
- b. Standard Profile for 0.062 and 0.125" PCB
- c. Standard Profile
- d. Standard Profile with Off-centered Latch
- e. Standard Profile with small panel Cutout
- f. Standard Profile Internal Shield
- g. Standard Profile Shielded

Others

Bottom Entry Low Profile

Category 5e/6 Patch Panels

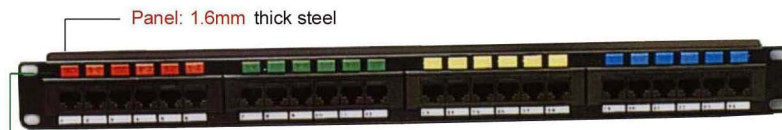


F. 1



F. 2

110 IDC Interface Connector
are color coded in pair for easy installation & cut down of running cable



F. 3

Panel: 1.6mm thick steel
Color Icon
Snap-in color icons allow users to quickly & easily identify their chosen media application.

Description:

Category 5e/6 patch panels available in 16, 24 and 48 RJ45 Ports with Krone LSA plus or 110 style UTP terminations. The panel is fabricated in steel, with a durable powder coated finish and screen printed port designations. A dual standards EIA 568 A/B colour code strip is supplied to ensure error free terminations.

Features:

These panels are fully circuit board mounted with the respective IDC connectors (Krone or 110). The circuit board allows compact high performance electrical connectivity exceeding Cat 5e/6 limits. These limits are achieved with both Krone and 110 connectors. Both IDC type connectors can be terminated with the Krone Sensor tool.

Termination is into a standard 19" ETSI rack and the 16, 24 outlet panels are one RU high (44.5mm). The 48 outlet panel is two RU high.

Cabling wire management is recommended with each unit at the front and at the back.

Use/Application:

Termination or twisted pair cables in a telecommunications wiring rack or distribution point.

Technical Specification:

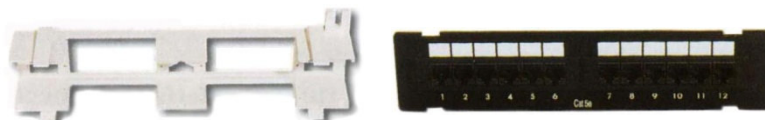
Dimension: 485mmx44 or 88mmx35mm

Weight: 0.4 or 0.8kg for 10 and 24 panels respectively

Electrical: Exceed Cat 5e/6 performance requirements for NEXT and Insertion Loss.

ORDERING INFORMATION

Part No.	Description	Port
PX-E01XX5	Cat 5e Patch Panel IDC	12
PX-E01XX4	Cat 5e Patch Panel IDC	16
PX-E01XX3	Cat 5e Patch Panel IDC	24
PX-E01XX6	Cat 5e Patch Panel IDC	48
PX-E01XX7	Cat 6 Patch Panel IDC	16
PX-E01XX1	Cat 6 Patch Panel IDC	24
PX-E01XX8	Cat 6 Patch Panel IDC	32
PX-E01XX2	Cat 6 Patch Panel IDC	48



F. 4



F. 5

Wiring Label: indication of wiring

KRONE or 110
are color coded in pairs for easy installation and cutdown of running cable.



F. 6

Modular Jack
meet FCC part 68

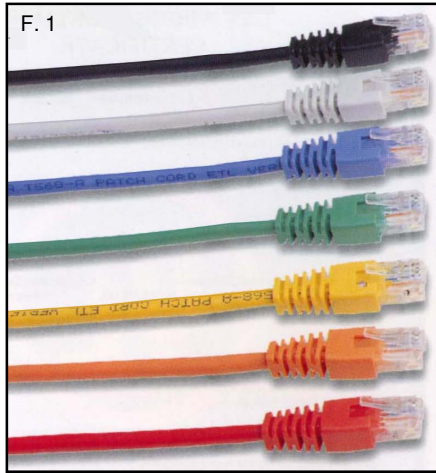
Panel: 1.6mm thick steel

Icon Hole

Snap-in icons allow users to quickly & easily identify their chosen media application.

Colored Frame
are available with black, white & blue

Patchcords



CAT5e/6 Unshielded Twisted Pair (UTP)

Unshielded twisted pair line cords are assemblies of two, three or four pair cable with modular plugs crimped at both ends. They offer a high performance alternative to satin modular line cords where crosstalk, EMI, or distance may be considerations.

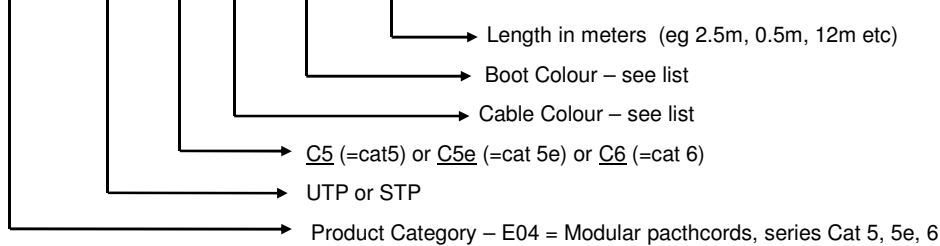
Cable consists of pairs of 24 AWG wire, each pair twisted at a rate varying between 2 to 12 twists per foot. Jacket material is either PVC or FRD construction in solid conductor cords. PVC for stranded cords only.

CAT5e/6 Shielded Twisted Pair (STP)

Same as above, using Shielded Twisted Pair Line Cord and plug 24 AWG stranded wire. Aluminum Mylar Shielding Wrapped around the inner conductors provides good protection from data errors. A drain wire helps to complete a proper ground connection. Allows long runs with less fear of EMI/RFI interference. Insulated with best grade of PVC formulation.

Ordering Information

PX-E04-XXX-X-XX-XX-XXm



Colour

- WH – White
- BK - Black
- RD - Red
- PU – Purple
- OR - Orange
- BR – Brown
- GY – Gray
- BL – Blue
- GN – Green
- PK – Pink
- YL - Yellow

Surface Mount Boxes



Single Type

The single surface mount jack accommodates one telecommunication data port. Installation is fast and easy with 110-type and Krone insulation displacement connector (IDC).

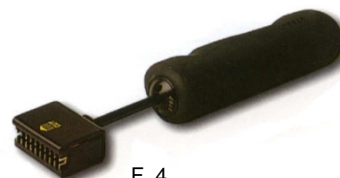
Duplex Type

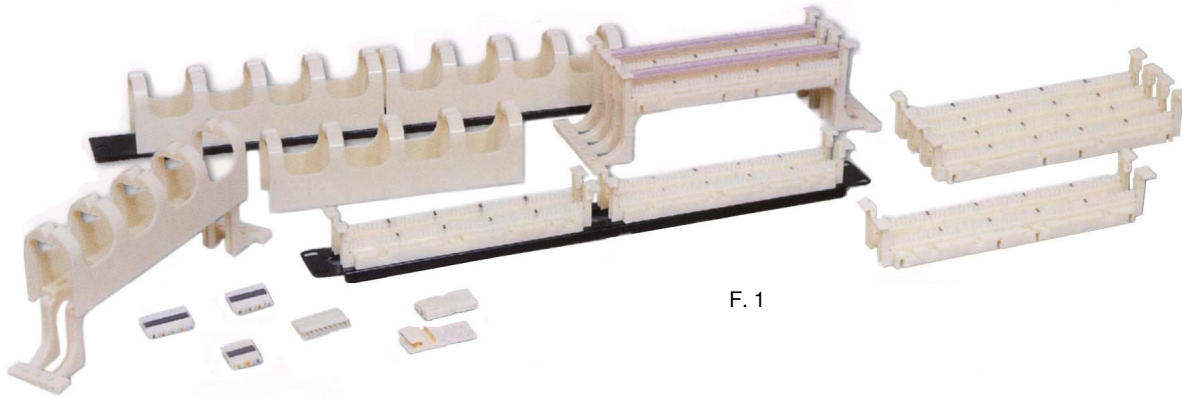
The duplex model accommodates two voice or data ports. Installation is fast and easy with 110-type and Krone IDC for 22-26 AWG inside wiring.

Both models mount easily on walls, floors and office furniture using screws or double-sided adhesive tape.

Hand Tools

For all your application tooling requirements (hand tools, semi automatic, fully automatic) please contact us.



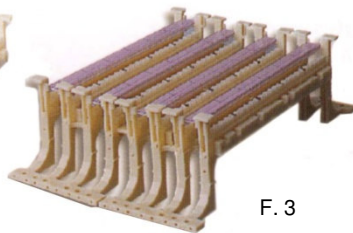


F. 1

110 Wiring Blocks



F. 2



F. 3

110 Wiring Blocks

The 110 Wiring Block is a fire-retardant moulded plastic block with horizontal index strips, each of which secures and organizes 25 cable pairs. The blocks accommodate 0.63mm – 0.404 mm (22-26 AWG) diameter conductors and can be mounted directly on surfaces.

Part No:	Description
a PX-G06-110B-50	50-pair 110 wiring block w/o legs & label holder
b PX-G06-110B-100	100-pair 110 wiring block w/o legs & label holder
c PX-G06-110BK-50	50-pair 110 wiring block w/legs & label holder
d PX-G06-110BK-100	100-pair 110 wiring block w/legs & label holder
e PX-G06-110BK-200	200-pair 110 wiring block w/legs & label holder
f PX-G06-110BK-300	300-pair 110 wiring block w/legs & label holder

Label holder

Available as a clear plastic strip which snaps onto the 110 Wiring Block and accepts color insert labels for pair or circuit designation. (P/N: PX-G06-110P Label holder)

Punch Down Tool

P/N: PX-G06-007A-110 for 110 connector block 5-pair used



F. 5

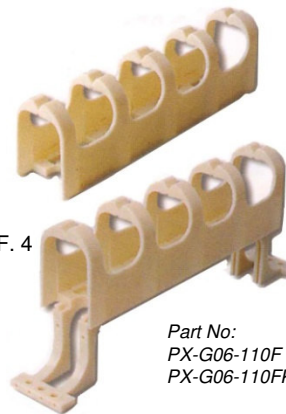
110 Connector Block

The 110 Connector Block utilize double-ended insulation displacement contacts (IDC) that terminate 22-26 AWG solid or stranded conductors. The blocks are available in 3, 4 & 5 pair sizes with the appropriate color coding.



Part No:	Description
PX-G06-110C-3	3-pair 110 connector block
PX-G06-110C-4	4-pair 110 connector block
PX-G06-110C-5	5-pair 110 connector block

110 Wiring Management



F. 4

The 110 Wire Management is a fire-retardant molded plastic frame which serves as a horizontal cable management for routing of patch cords and cross-connect wire.

Part No:	Description
PX-G06-110F	110 wiring management w/o legs
PX-G06-110FK	110 wiring management w/ legs

Patch Cord

The patch cords are utilized for connecting with 110 cross-connect system used as jumper cords or end-user patch cords.

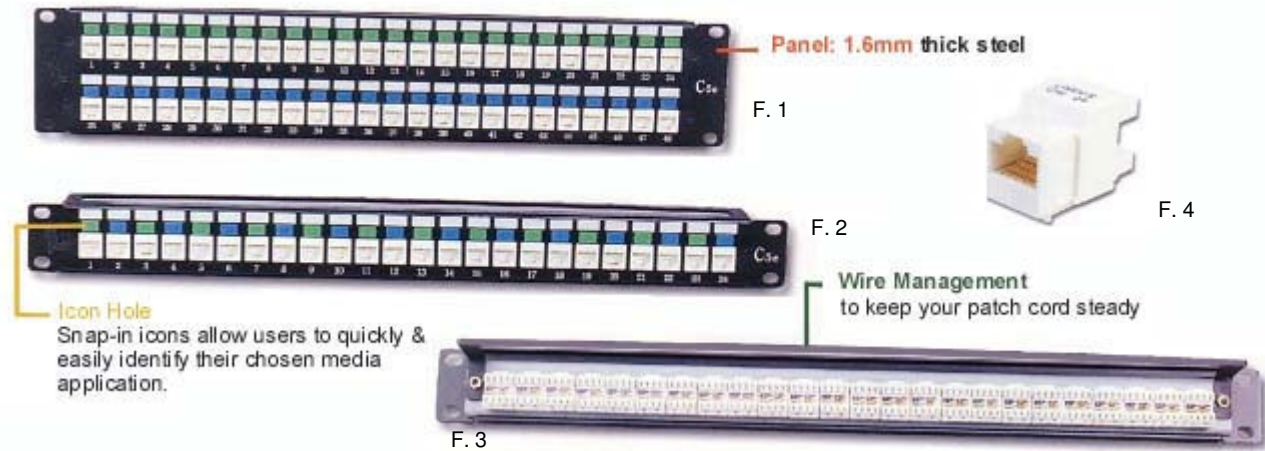
* Available in 110 IDC plug to 110 IDC plug & 110 IDC plug to modular plug.



F. 6

Category 5e/6 Keystone Patch Panel & Wire Management

1U 24 Keystone Jack type Patch Panel



ORDERING INFORMATION

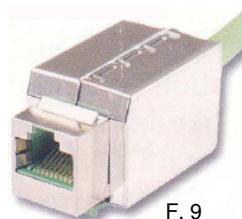
Part No.	Description	Wiring	Dimension (HxW)
PX-E01XX9	24 Unshielded RJ45 8PC W/O Wire Management	EIA/TIA T568A/B	1.75" x 19" 1U
PX-E01X10	48 Unshielded RJ45 8PC W/O Wire Management	EIA/TIA T568A/B	3.50" x 19" 2U
PX-E01X11	24 Shielded RJ45 8PC W/O Wire Management	EIA/TIA T568A/B	1.75" x 19" 1U
PX-E01X12	48 Shielded RJ45 8PC W/O Wire Management	EIA/TIA T568A/B	3.50" x 19" 2U
PX-E01X13	24 Unshielded RJ45 8P8C W/Wire Management	EIA/TIA T568A/B	1.75" x 19" 1U
PX-E01X14	48 Unshielded RJ45 8P8C W/Wire Management	EIA/TIA T568A/B	3.50" x 19" 2U
PX-E01X15	24 Shielded RJ45 8P8C W/Wire Management	EIA/TIA T568A/B	1.75" x 19" 1U
PX-E01X16	48 Shielded RJ45 8P8C W/Wire Management	EIA/TIA T568A/B	3.50" x 19" 2U

Shield Blank Patch Panel



ORDERING INFORMATION

Part No.	Description	Dimension (HxW)
PX-E01X17	16 port Shield Blank Patch Panel	1.75" x 19" 1U
PX-E01X18	24 port Shield Blank Patch Panel	3.50" x 19" 2U
PX-E01X19	32 port Shield Blank Patch Panel	3.50" x 19" 2U



Wire Management

The wire management are designed to accompany patch panels, to help keeping large bundles well-organized. The wire management can be mounted on standard 19" racks or cabinets.

Description:

Various wire management components are available from Photonix Communications Pty Ltd. These products allow the installation of a well executed structured solution making it easy for services to be reconfigured and maintained with ease and without interruption to adjacent services. Offer the following features:-

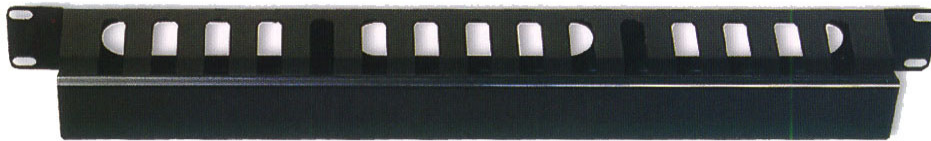
- Wiring loom bar for strain relief and bundling of cables at the rear of patch panels
- Ring loop panel for tidy routing of patch leads
- Labeling strip for custom labeling of patch panels
- Site records book for efficient documentation of cable installation
- Cable management trays for front and rear cable management.

*** Using wire management to keep your patch cord steady as always.**

ORDERING INFORMATION

<u>Part No:</u>	<u>Description</u>	<u>Dimension (H x W)</u>
PX-E05XX3	Metal Type Wire Hanger	1.75" x 19" 1U

1U



F. 1

ORDERING INFORMATION

<u>Part No:</u>	<u>Description</u>	<u>Dimension (H x W)</u>
PX-E05XX4	Metal Type Wire Hanger	1.75" x 19" 1U
PX-E05XX5	Plastic Type Wire Hanger	1.75" x 19" 1U
PX-E05XX6	Metal Type Wire Hanger	3.50" x 19" 2U
PX-E05XX7	Plastic Type Wire Hanger	3.50" x 19" 2U

2U



F. 2

1U



F. 3