



Delta Linc Inc.

Value to Network

Product Catalogue

Last Updated - 2025

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Mahadevapura,
Bangalore – 560048, India
GST: 29AAVFD3985C1ZW





CAT6 / CAT6A UTP Keystone Jack 180 Deg



Standard:

C5E/C6/C6A permanent link: conform to ANSI/TIA/EIA-568 b.2-1.

Electrical:

- Voltage rating: 125 VAC RMS;
- Current rating: 1.5 AMP;
- Contact resistance: 100 Million HMS max;
- Insulation resistance: 1000 MEGOHMS min. @ 500 VDC;
- Dielectric strength: 750 VAC RMS 60 Hz, 1 min.;

Mechanical:

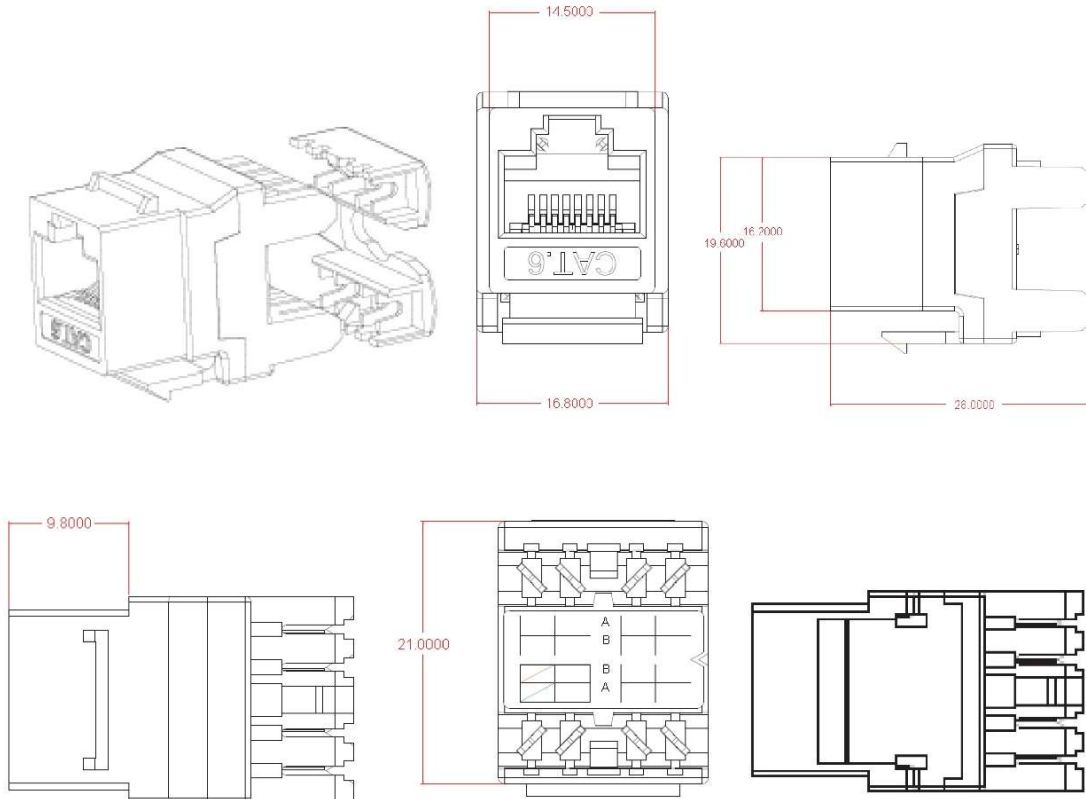
- Housing Material: PC
- INSERT Material: Flame retardant PC110
- PCB Material:FR-4 T=1.2MM
- Contact Material: phosphor bronze stamp pin T=0.35MM
- IDC Material: phosphor bronze T=0.5mm with Tin Plating
- RJ 45 Jack life: 750 Times min.;
- IDC life: 200 times min.;
- Wire: AWG 22-24
- TIA Cat. 5E perm Link test: worst pair next margin ≥ 5 dB
- TIA Cat. 6 perm Link test: worst pair next margin ≥ 3 dB
- TIA Cat. 6A perm Link test: worst pair next margin ≥ 3 dB
- Retentiveness of insertion structure: 50N 60 \pm 5 S.





CAT6 / CAT6A UTP Keystone Jack 180 Deg

General Drawing





CAT6 / CAT6A FTP Keystone Jack 180 Deg



Standard:

C6/C6A permanent link: conform to AN-SI/TIA/EIA-568 b.2-1.

Electrical:

- Voltage rating: 125 VAC RMS;
- Current rating: 1.5 AMP;
- Contact resistance: 20 Million HMS max;
- Insulation resistance: 100 MEGOHMS min. @ 500 VDC;
- Dielectric strength: 750 VAC RMS 60 Hz, 1 min.;

Mechanical:

- Housing Material: ZINC ALLOY
- INSERT MATERIAL: Flame retardant PC110
- PCB MATERIAL:FR-4 T=1.2MM
- Contact MATERIAL: phosphor bronze stamp pin T=0.35MM
- IDC Material: phosphor bronze T=0.5mm with Plating
- RJ 45 Jack life: 750 cycles min.;
- IDC life: 200 times min.;
- Wire: AWG 22-24
- TIA Cat. 6 perm Link test: worst pair next margin ≥ 7 dB
- TIA Cat. 6A perm Link test: worst pair next margin ≥ 5 dB
- Retentiveness of insertion structure: 50N 60 \pm 5 S.

Environment of Adaptations:

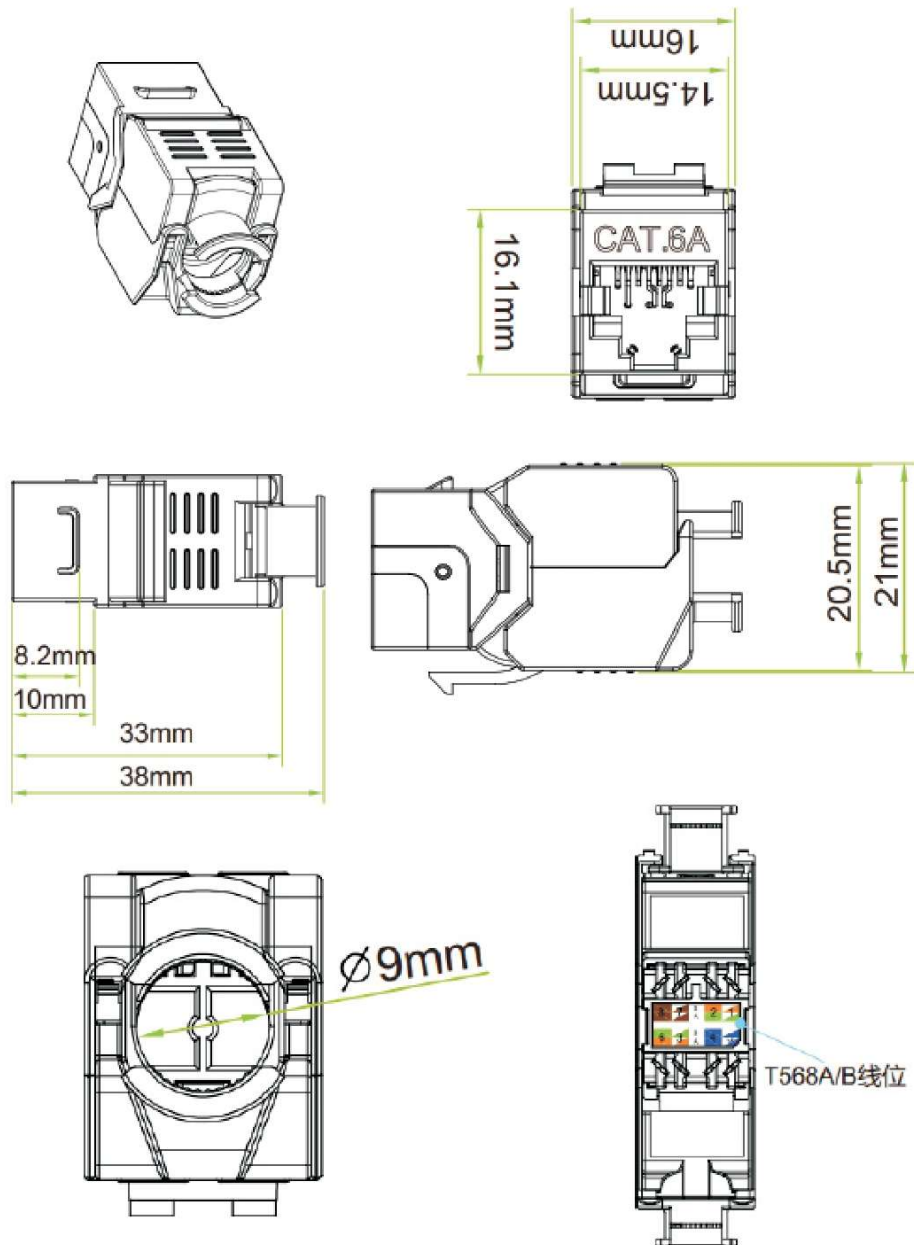
- Storage: -40° ~ 70°
- Operation: -10° ~ 60°





CAT6 / CAT6A FTP Keystone Jack 180 Deg

General Drawing





0.5U 19" FTP Blank Patch Panel – 24 Ports



Features:

- Material:
SPCC with nickel plating
- Cat.5e/Cat.6/Cat.6a/Cat.7 keystone jacks can be assembled in this panel;
- All kinds of cables with different dimensions can be fixed on the patch panel. Fit for Horizontal Distribution in the equipment room and equipment connecting;

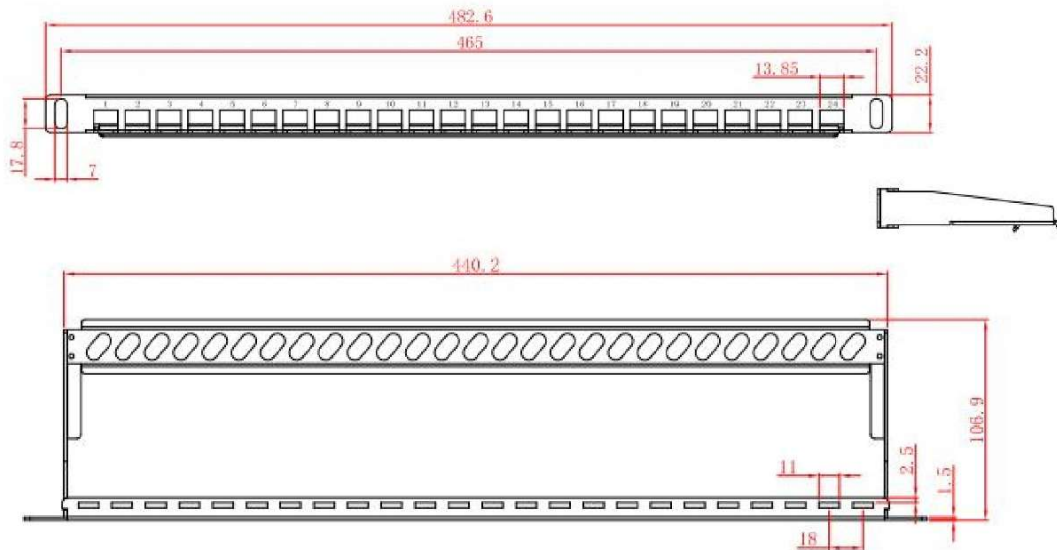
Environment of Adaptations:

- Storage: -40° ~ 70°
- Operation: -10° ~ 60°

Color:

Metallic Color

General Drawing:





0.5U 19" UTP Blank Patch Panel – 24 Ports



Features:

- Material: SPCC
- Cat.5e/Cat.6/Cat.6a/Cat.7 keystone jacks can be assembled in this panel;
- All kinds of cables with different dimensions can be fixed on the patch panel. Fit for Horizontal Distribution in the equipment room and equipment connecting;

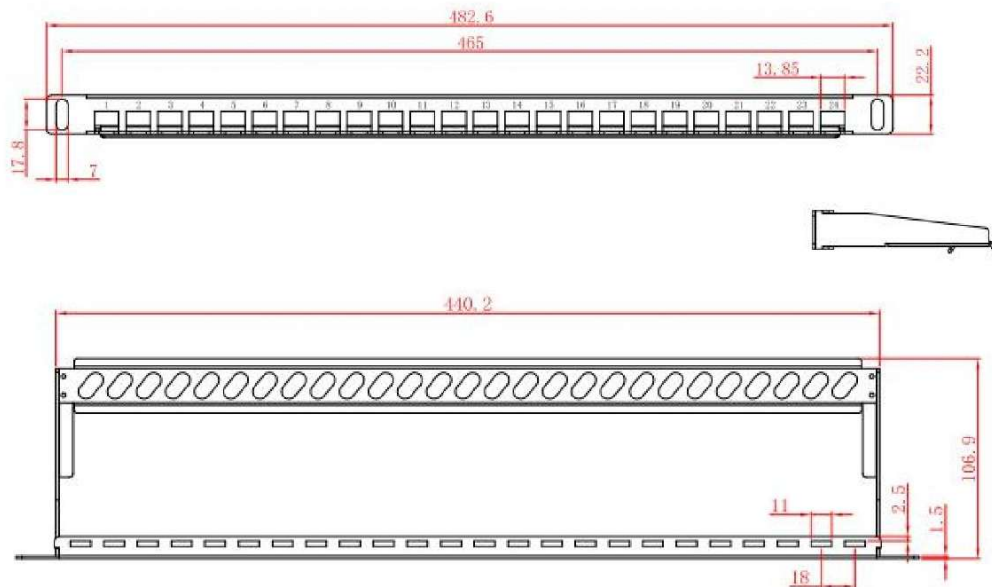
Environment of Adaptations:

- Storage: -40° ~ 70°
- Operation: -10° ~ 60°

Color:

Black

General Drawing:





Unloaded Patch Panels UTP 1/3

Delta Linc's unloaded patch panels are engineered to meet the highest performance standards in the industry. These panels can accommodate various keystone jacks in category 5e/ category 6 / category 6a.

These panels are available in 10, 24 and 48 port configuration.

They are also available in customized configuration as desired.

Delta Linc's unloaded patch panels are available in mild steel and aluminium.

Delta Linc's unloaded patch panels come with cable tie and back bar for cable management on the backside.

10 Port 1U Unloaded patch panel for SOHO racks



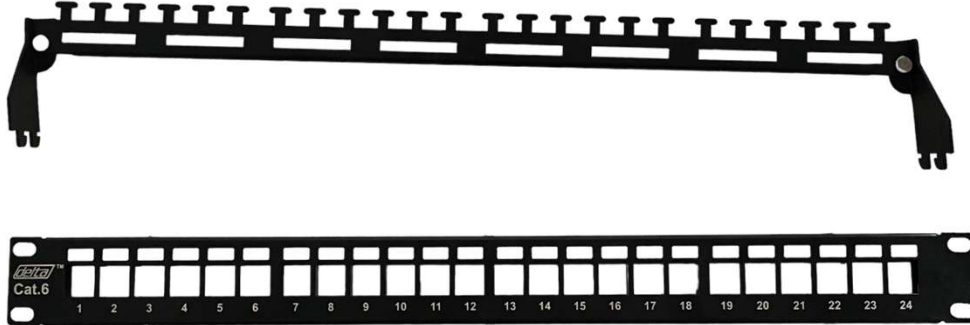
Length (mm)	Width (mm)	Height (mm)
254	87	42





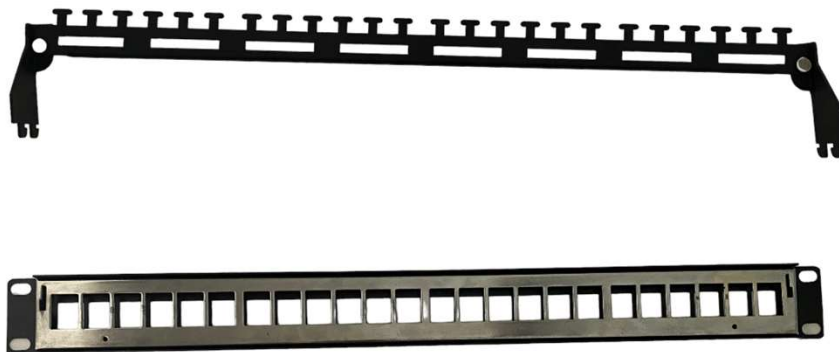
Unloaded Patch Panels UTP 2/3

24 Port 1U Unloaded patch panel for UTP jacks, 19" rack mountable



Length (mm)	Width (mm)	Height (mm)
482	87	42

24 Port 1U Unloaded patch panel for STP jacks, 19" rack mountable



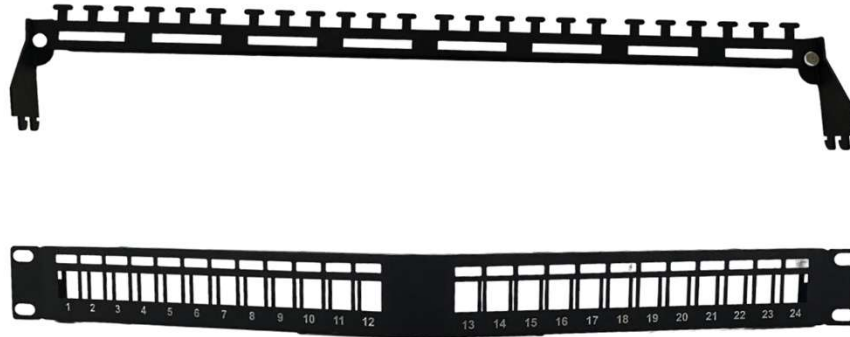
Length (mm)	Width (mm)	Height (mm)
482	87	42





Unloaded Patch Panels UTP 3/3

24 Port 1U Unloaded angled patch panel for UTP jacks, 19" rack mountable



Length (mm)	Width (mm)	Height (mm)
482	139	42

24 Port 1U Unloaded angled patch panel for STP jacks, 19" rack mountable



Length (mm)	Width (mm)	Height (mm)
482	139	42





1U 19" UTP Cat. 6/ Cat. 6A Patch Panel - 24 Ports



Electrical:

- Voltage rating: 125 VAC RMS;
- Current rating: 1.5 AMP;
- Contact resistance: 20 Million HMS max. ;
- Insulation resistance: 100 MEGOHMS min. @ 500 VDC;
- Dielectric strength: 750 VAC RMS 60 Hz, 1 min. ;
- C6 permanent link: conform to ANSI/TIA/EIA-568 b.2-1.

Mechanical:

- Housing Material: PBT+15% GF;
- Panel frame: ST-12, powder coating in black color;
- IDC material: PC, Contact: phosphor bronze, Tin plated;
- RJ 45 Jack life: 750 cycles min.;
- IDC life: 200 times min. ;
- Wire: AWG 22-24;
- TIA Cat. 5E fluke perm link test: worst pair next margin ≥ 8 dB;
- TIA Cat. 6 fluke perm link test: worst pair next margin ≥ 6 dB;
- TIA Cat. 6A fluke perm link test: worst pair next margin ≥ 5 dB;
- Retentiveness of insertion structure: 50N 60 \pm 5 S.

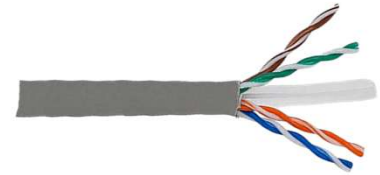
Environment of Adaptations:

- Storage: - 40° ~ 70°
- Operation: -10° ~ 60°





CAT6 Patch Cable UTP 1/2



Product Description

Category 6 (250MHz), 4-Pair, UTP, Stranded Patch Cord Cable, Polyethylene Insulation, PVC/LSZH Jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor

Material	Nominal Wire Diameter	No .of Strands	Total Number of Pairs	Conductor Count
Electrolytic Grade Copper	0.195 ± 0.015 mm	7	4	8

Insulation

Type	Element	Type	Material	Nominal Diameter
UTP	Individual pair	Dielectric	Polyethylene	0.980 mm

Color Chart

Core	Color
Pair 1 (4-5)	White & Blue
Pair 2 (1-2)	White & Orange
Pair 3 (3-6)	White & Green
Pair 4 (7-8)	White & Brown

Core:

Type	Cross Filler Material	Foil Screen	Braid Screen	Drain Wire
UTP	PE	None	None	None



CAT6 Patch Cable UTP 2/2

Outer Jacket Material

Type	Material	Color	Nominal Diameter	Diameter +/- Tolerance	Ripcord
UTP	PVC / LSZH	As per Customer Requirements	5.8 mm	0.2 mm	Polyester Yarn

Electrical Characteristics (20 ± 3°C)

Max. Conductor Resistance	9.38 Ω/100 M
Max Resistance Unbalanced [%]	5 %
Max. Mutual Capacitance	5.6 nF/100 M
Max. Capacitance Unbalance	330 pF/100 M
Nominal Characteristic Impedance	100 ± 15 Ω @ 100 MHz
Max. Delay Skew	45 ns/100 M
Max. Capacitance Unbalance	330 pF/100 M
Dielectric Strength	1.5 kv AC for 2 seconds
Insulation Resistance	≥150 MΩ/km
Temperature Rating	-20 to 60 °C

Transmission Characteristics (100 Meter)

Freq (Mhz)	Insertion Loss (dB/100)	RL (dB/100m)	NEXT (dB/100m)	PSNEXT (dB/100m)	ACRF (dB/100m)	PSACRF (dB/100m)	DELAY ns/100m
1	2.0	20.0	74.3	72.3	67.8	64.8	570
4	3.8	23.0	65.3	63.3	55.8	52.8	552
8	5.3	24.5	60.8	58.8	49.7	46.7	547
10	6.0	25.0	59.3	57.3	47.8	44.8	545
16	7.6	25.0	56.2	54.2	43.7	40.7	543
20	8.5	25.0	54.8	52.8	41.8	38.8	542
25	9.5	24.3	53.3	51.3	39.8	36.8	541
31.25	10.7	23.6	51.9	49.9	37.9	34.9	540
62.5	15.4	21.5	47.4	45.4	31.9	28.9	539
100	19.8	20.1	44.3	42.3	27.8	24.8	538
200	29.0	18.0	39.8	37.8	21.8	18.8	537
250	32.8	17.3	38.3	36.3	19.8	16.8	536

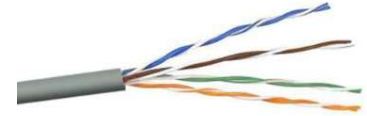
Variants

Item # Color	Item # Color	Length (Meter)	Packing
LAS623UTPBLA	(As per customer Requirements)	305	Tangle Free coil





CAT6 LAN Cable UTP 1/3



Product Description

Category 6 (250MHz), 4-Pair, UTP, Premise Horizontal Cable, 23 AWG Solid Bare Copper conductors, Polyethylene insulation, PVC Jacket

Technical Specifications

Product Overview

Environmental Characteristics: Indoor

Suitable Applications: Horizontal and building backbone cable; Support Category 6 applications, support up to 1GBASE-T or 1-Gigabit Ethernet

Physical Characteristics (Overall)

Conductor

Element	Individual pair (Main & Strip marking Insulated wire)
Material	Annealed Bare Copper
Stranding	Solid
Conductor Size:	23 AWG
Total Number of Pairs:	4
Conductor Count:	8

Insulation

Element	Type	Material	Nominal Diameter
Individual pair	Dielectric	Polyethylene	0.980 mm

Color Chart

Core	Color
Pair 1 (4-5)	White & Blue
Pair 2 (1-2)	White & Orange
Pair 3 (3-6)	White & Green
Pair 4 (7-8)	White & Brown

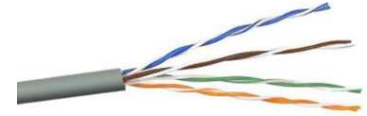
Outer Jacket Material

Material	Color	Nominal Diameter	Diameter +/- Tolerance	Ripcord
PVC - Polyvinyl Chloride	Blue,Grey,Yellow	6.0 mm	0.2 mm	Polyester Yarn





CAT6 LAN Cable UTP 2/3



Electrical Characteristics (20 ± 3 °C)

Max. Conductor Resistance	9.38 Ω/100 M
Max Resistance Unbalanced [%]	5 %
Max. Mutual Capacitance	5.6 nF/100 M
Max. Capacitance Unbalance	330 pF/100 M
Nominal Characteristic Impedance	100 ± 15 Ω @ 100 MHz
Max. Delay Skew	45 ns/100 M
Max. Capacitance Unbalance	330 pF/100 M
Dielectric Strength	1.5 kv AC for 2 seconds
Insulation Resistance	≥150 MΩ/km

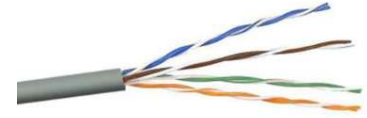
Transmission Characteristics (100 Meter)

Freq (MHz)	Insertion Loss (dB/100)	RL (dB/100m)	NEXT (dB/100m)	PSNEXT (dB/100m)	ACRF (dB/100m)	PSACRF (dB/100m)	DELAY ns/100m
1	2.0	20.0	74.3	72.3	67.8	64.8	570
4	3.8	23.0	65.3	63.3	55.8	52.8	552
8	5.3	24.5	60.8	58.8	49.7	46.7	547
10	6.0	25.0	59.3	57.3	47.8	44.8	545
16	7.6	25.0	56.2	54.2	43.7	40.7	543
20	8.5	25.0	54.8	52.8	41.8	38.8	542
25	9.5	24.3	53.3	51.3	39.8	36.8	541
31.25	10.7	23.6	51.9	49.9	37.9	34.9	540
62.5	15.4	21.5	47.4	45.4	31.9	28.9	539
100	19.8	20.1	44.3	42.3	27.8	24.8	538
200	29.0	18.0	39.8	37.8	21.8	18.8	537
250	32.8	17.3	38.3	36.3	19.8	16.8	536





CAT6 LAN Cable UTP 3/3



Max. Conductor Resistance	9.38 Ω /100 M
Max Resistance Unbalanced [%]	5 %
Max. Mutual Capacitance	5.6 nF/100 M
Max. Capacitance Unbalance	330 pF/100 M
Nominal Characteristic Impedance	100 \pm 15 Ω @ 100 MHz
Max. Delay Skew	45 ns/100 M
Max. Capacitance Unbalance	330 pF/100 M
Dielectric Strength	1.5 kv AC for 2 seconds
Insulation Resistance	\geq 150 M Ω /km

Standards

ISO/IEC Compliance:	ISO/IEC 11801
Data Category:	Category 6
ANSI Compliance:	ANSI/TIA/EIA 568-2.D

Flammability, Testing

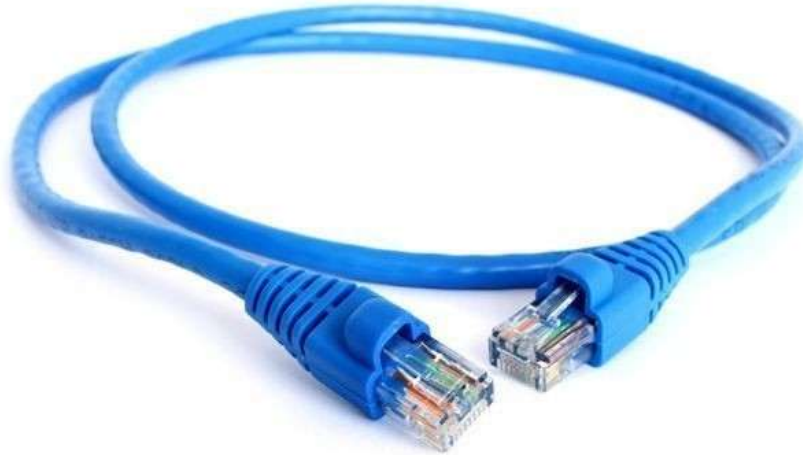
ISO/IEC Flammability:	IEC 60332-1
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Item # Color	Item # Color	Length (Meter)	Packing
LAS623UTPBLA	Blue	305	Tangle Free coil
LAS623UTPBLB	Blue	305	Reel in a box
LAS623UTPGYA	Grey	305	Tangle Free coil
LAS623UTPGYB	Grey	305	Reel in a box



CAT 6 / CAT 6A UTP Patch Cords

Delta Linc’s patch cables are assemblies of UTP CAT6 LAN Cable 4 pairs, factory crimped to 50micro inches gold plated CAT6 RJ45 male connectors at both ends. These patch cables are available in two versions - assembled and molded.



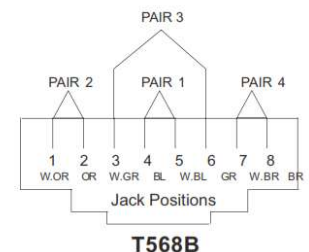
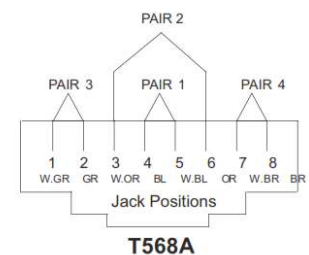
Specifications:-

Standards :	TIA/EIA 568A, EN 50173, ISO/IEC 11801 TIA/EIA Bulletin TSB 67 for wire requirements TIA/EIA TSB 40-A & TSB 36.
Verification :	3P, UL, C(UL), ETL
Connector :	8P8C RJ45, 50μ inch gold plating
Wiring :	Straight (568A + 568B) or Crossover (568A + 568B)
UTP :	24AWG, 7/0. 2mm; 26AWG, 7/0. 16mm

PAIR ASSIGNMENTS

Pair Identification	Color Code for Conductor	T568A Pin Assignment	T568B Pin Assignment
Pair 1	White/ Blue Blue	5 4	5 4
Pair2	White/ Orange Orange	3 6	1 2
Pair3	White/ Green Green	1 2	3 6
Pair4	White/ Brown Brown	7 8	7 8

WIRING MAP





Fiber Optic Patch Panel

Wall Mounted Fiber Optic Patch Panel

This is a pre-configured 12 port fiber optic wall-mount patch panels. This panel is a cost effective product. It is adaptable to all standard fiber optic connectors, such as SC, ST, LC, MTRJ and FC.



Rack Mounted Fiber Optic Patch Panel Fixed Type

Delta Linc's fixed / economic fiber patch panel is a recessed unit which has 19" mountings. They are available in 12, 18, 24 & 48 port with cable management suitable for ST/ SC adaptors. Fiber patch panels are used in the fiber cabling channel to hold the terminated fiber. They are available with rollers, adapters, splice trays having labelling features.





Rack Mounted Fiber Optic Patch Panel Telescopic Type

Delta Linc's Telescopic Rack Mount fiber patch panels are recessed type of units which have 19" mountings. They are available from 1U size till 8U size. These panels are suitable for all kinds of adapters.

For every 1U size, there are 3 numbers of adaptor plates. Each adaptor plate can accommodate upto 8 ports.

These fiber patch panels are used in the fiber cabling channel to hold the terminated fiber. They are available with labelling feature. Adaptors have to be procured separately.





Accessories

Buses



Bus for Keystone Jack

This is a plastic interface for mounting top and bottom locking keystone jacks to any metallic or plastic plate. The colours can be customized as needed.



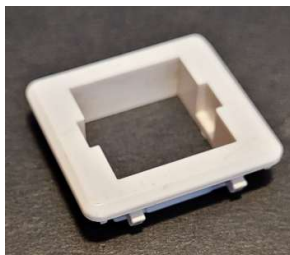
Bus for Coaxial connector

This is a plastic interface for mounting coaxial connectors to any metallic or plastic plate. The colours can be customized as needed.



Blank Bus

This is a plastic interface for covering gaps created on any metal plate. The colours can be customized as needed.



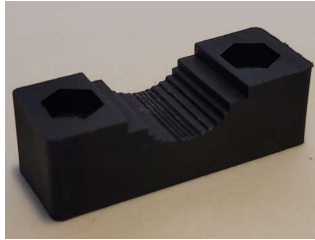
Bus for Keystone Jack

This is a plastic interface for mounting side locking keystone jacks to any metallic or plastic plate. The colours can be customized as needed.





Accessories



Cable Holder

This is a plastic part which is used in pairs to tie up incoming cable into an enclosure.



Rings

These are 1U rings used in cable managers for cable management. Available in 2 depths of 40mm, 60mm respectively.



Rings

These are 2U rings used in cable managers for cable management. Available in 2 designs as per picture.



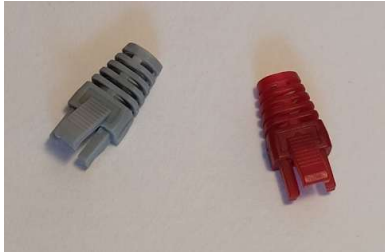
Half Round Rollers

These are used to accommodate the extra length of cable inside a LIU / enclosure.



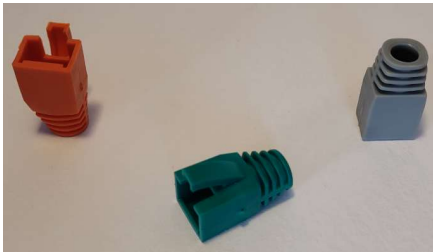


Accessories



Lockable Boots

These boots are a part of patch cord assembly. They sit inside the RJ45 male plug. Suitable for cable with 6mm outside diameter. The colours can be customized as needed.



Boots

These boots are a part of patch cord assembly. They fit firmly on the outside of the cable and RJ45 male plug. They are available with 5, 6, 7 and 8 mm hole size.



Patch Cord Dust Cover

This dust cover prevents water and dust from entering the RJ45 male plug. It can be de-attached when not required.



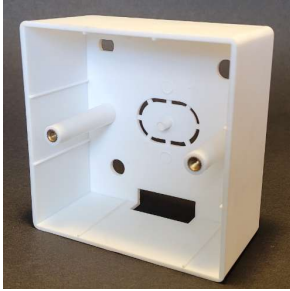
Dust Cover for Keystone Jack

This dust cover prevents water and dust from entering the keystone jack.



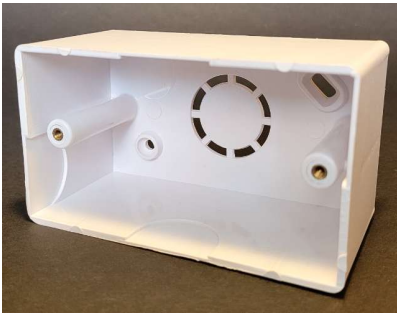


Accessories



Surface mount back box

This back box is 86 x 86 x 42 mm. Both single and dual face plate can sit on it. This box is fitted on the surface of the wall.



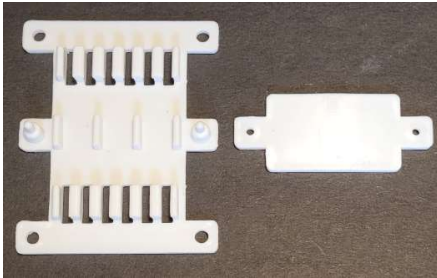
Concealed American style back box

This back box is 100 x 58 x 50 mm. Both single and dual American style face plate can be fitted on this. This box is concealed inside the wall.





Accessories



6 Core Splice holder

This splice holder can accommodate 6 numbers of fiber protection sleeves. This comes with a secondary cover on top. Outside dimensions are 50 x 60 mm.



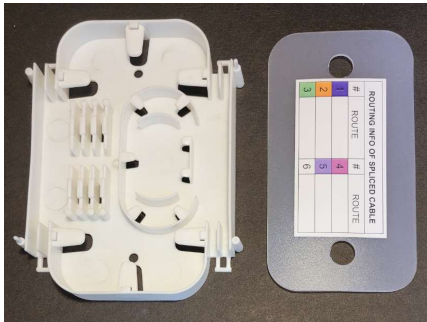
6 Core Splice holder

This splice holder can accommodate 6 numbers of fiber protection sleeves. Outside dimensions are 57 x 28 mm.



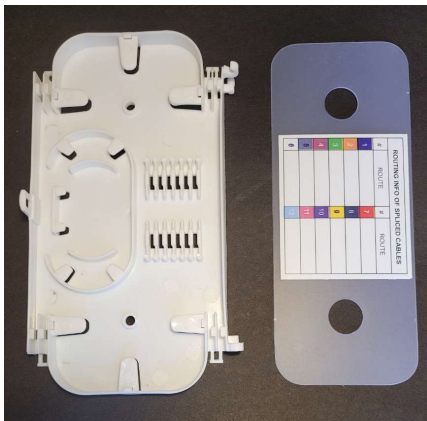


Accessories



6 Core Splice tray

This splice tray can accommodate 3 x 2 numbers of fiber protection sleeves. This comes with a labelled cover for cable routing and management. This tray can accommodate up to 1m of excess fiber core length. Dimensions are 114 x 90 x 15mm.



12 Core Splice tray

This splice tray can accommodate 6 x 2 numbers of fiber protection sleeves. This comes with a labelled cover for cable routing and management. This tray can accommodate up to 1m of excess fiber core length. Dimensions are 190 x 110 x 15mm.





Accessories



Un-shuttered face plate for side locking keystone jack

This is a British style face plate. Dimensions are 86 x 86 mm. These face plates are available in single and dual port. They can accommodate side locking keystone jacks only.



Un-shuttered face plate for top and bottom locking keystone jack

This is a British style face plate. Dimensions are 86 x 86 mm. These face plates are available in single and dual port. They can accommodate top and bottom locking keystone jacks only.



Shuttered face plate for top and bottom locking keystone jacks – 2 frame

Shuttered face plate for top and bottom locking keystone jack



This is a British style face plate. Dimensions are 86 x 86 mm. These face plates are available in single and dual port. They can accommodate top and bottom locking keystone jacks only. They have a shutter assembly that prevents dust entry into the keystone jack.





Accessories

Hex modular face plate



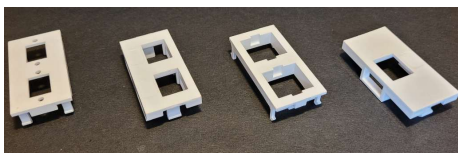
This is an American style face plate. Dimensions are 110 x 70 mm. This frame can accommodate 3 numbers of snap modules. Each snap module can have 1 or 2 ports or a blank.

Quad modular face plate



This is a British style face plate. Dimensions are 86 x 86 mm. This frame can accommodate 2 numbers of snap modules. Each snap module can have 1 or 2 ports or a blank.

Snap modules

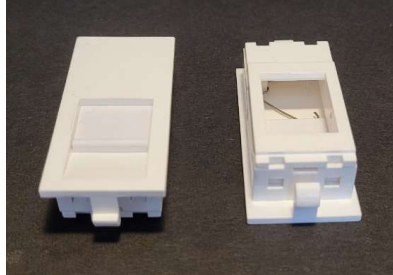


These are plastic receptacles. Their dimensions are 50 x 25mm. They are available in single and dual port for top and bottom locking jacks and side locking jacks separately. They are available for 2 numbers SC simplex adapters and also in the blank format.





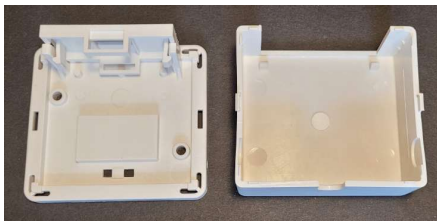
Accessories



Data receptacle for electrical modular switch plates

This is a plastic receptacle which can accommodate 1 number data jack. This receptacle can be mounted on any modular plate in the electrical segment.

Surface mount modular box



This is a plastic box mounted on a wall surface. Dimensions are 75 x 62 x 27mm. This can accommodate 1 number snap module of any combination.

Surface mount jack-flat



This is a surface mounted box in-built with a CAT6 data jack. Dimensions are 55 x 42 x 27mm.





Accessories



Economic Termination Tool

This tool can terminate only 1 core of the 8 available cores. This can be used for 90 deg and 180 deg keystone jack.



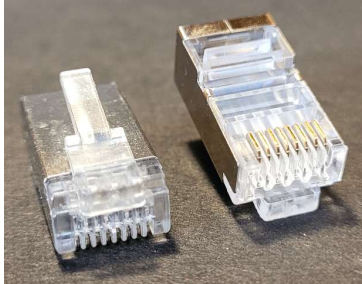
Termination Tool

This tool can terminate and cut excess wire for all 8 cores of the LAN cable in a single step. This can be used for 90 deg and 180 deg keystone jack.



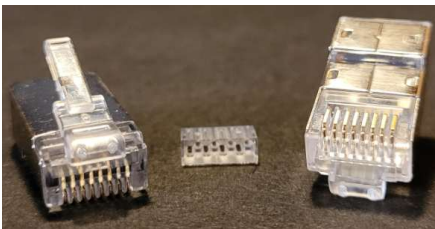
Accessories

RJ45 Male Connectors – STP Range



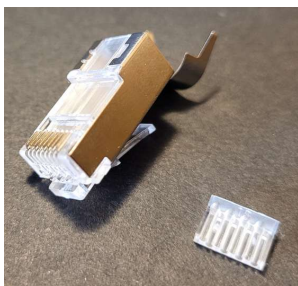
CAT5e STP RJ45 Male Connector

This connector is a single body connector. It has a metallic shielding on the outer body. The contact pin areas are with 50μ” gold plating. Cable connections for all 8 cores are in a single line.



CAT6 STP RJ45 Male Connector

This connector is a single body connector. It has a metallic shielding on the outer body. The contact pin areas are with 50μ” gold plating. Cable connections are in 4 up + 4 down configuration.



CAT7 STP RJ45 Male Connector

This connector is a 2 body connector. It has a metallic shielding on the outer body. The contact pin areas are with 50μ” gold plating. There is a cable gripper at the end of the connector.

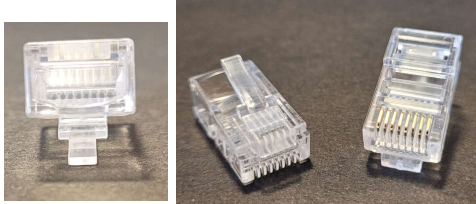




Accessories

RJ45 Male Connectors – UTP Range

CAT5e single body



CAT5e UTP RJ45 Male Connector

This connector is a single body connector. It has a polycarbonate outer body. The contact pin areas are with 50 μ ” gold plating. Cable connections for all 8 cores are in a single line.

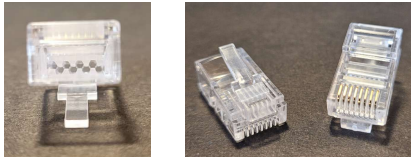
CAT6 2 body



CAT6 UTP RJ45 Male Connector

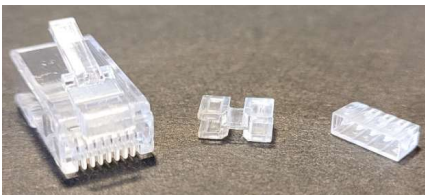
This connector comes in a single body / 2 body construction. It has a polycarbonate outer body. The contact pin areas are with 50 μ ” gold plating. Cable connections are in 4 up + 4 down configuration.

CAT6 single body



CAT6a UTP RJ45 Male Connector

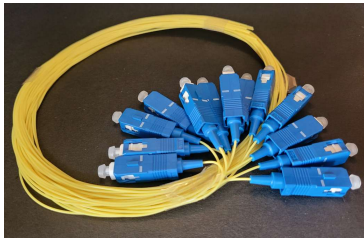
This connector is a 3 body connector. It has a polycarbonate outer body. The contact pin areas are with 50 μ ” gold plating. Cable connections are in 4 up + 4 down configuration.





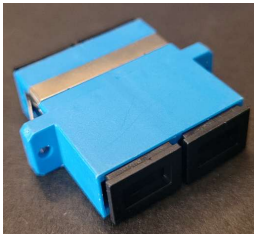
Accessories

Fiber Pigtails



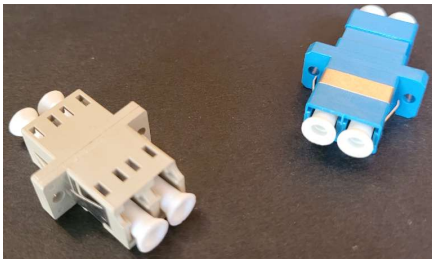
This is a SC, single mode, length 1m pigtail. We can offer you pigtails with ST / FC / LC / E2000 connectors in single and multi mode versions. Standard length is 1m. We can also customize the length as per your requirement.

SC Duplex Fiber Adapters



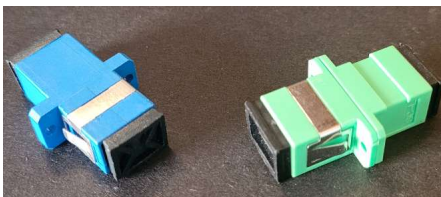
This is a SC, single mode, dual adapter with flange. We can offer you SCAPC adapters. We also have a range of OM3 & OM4 adapters.

LC Duplex Fiber Adapters



This is an LC, single mode (blue colour) dual adapter with flange. LC multimode adapter is grey in colour. The LCAPC adapter comes in green colour.

SC Simplex Fiber Adapters



This is a SC, single mode, simplex adapter with flange. SCAPC adapter is green in colour. We also have a range of OM3 & OM4 adapters.

Hybrid Fiber Adapters



These come with metal / plastic bodies in various combinations. They can be simplex and duplex.



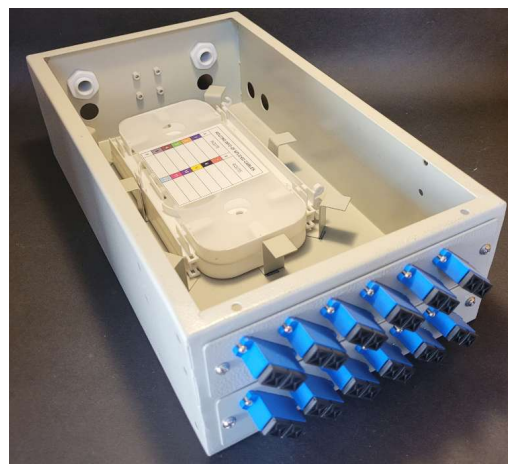


Accessories

Fiber DIN Rail LIU



These are various Fiber LIUs, DIN rail mountable. These are mountable on 35mm DIN rails. Capacity is from 6 port to 24 port. They can have SC / ST / LC interface as per requirement. They are fitted with splice trays / splice holders as per your convenience.





Accessories

Fiber Wall Mount LIU



Delta Linc's Fiber Optic Wall-Mount Patch Panels provide a convenient and rugged termination point for fiber optic cable. These wall-mounted patch panels provide a flexible cable management system using various adaptor plates and splice organizer trays. These wall mount series are cost effective and provide quick field installation solutions for your needs. They have a capacity of 6 / 12 / 24 / 48 ports.





Accessories

Horizontal Cable Managers - Ring Type



1U Size



2U Size

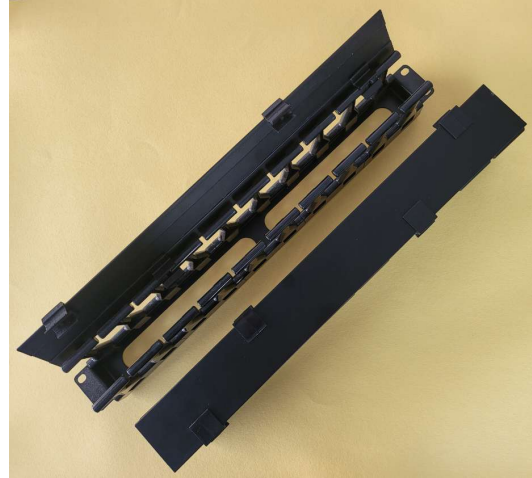
Horizontal Cable Management System provides neat and efficient means for routing and protecting cables on 19" racks. These Panels keep your cables organised yet accessible so that moving, adding & changing are easier than ever before. These Panels are designed to satisfy current Front Side Only and future Closet cabling needs. The Rings are made from black, high strength thermoplastic and have equally spaced mounting holes for effective cable management & cable routing. They are available in 1U & 2U sizes.





Accessories

Horizontal Cable Managers – Hinged Type - Metal & Plastic



1U Type



2U Type

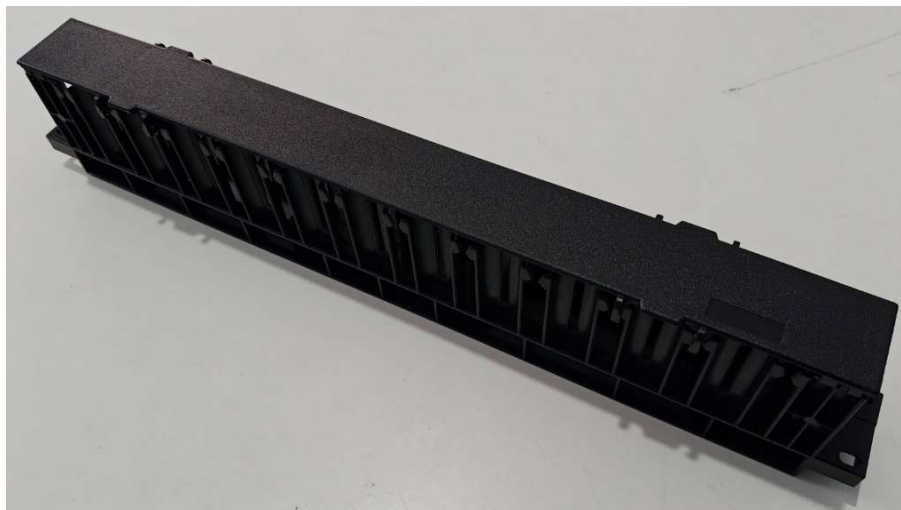
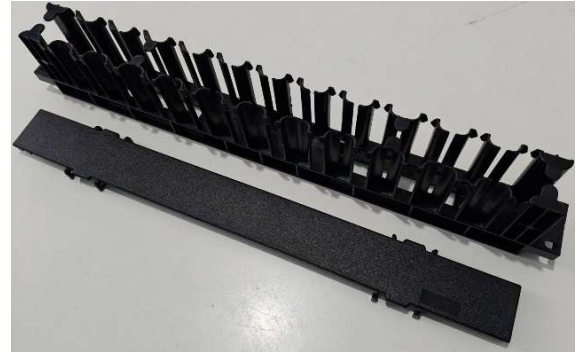
These are available in 2 sizes – 1U, 2U. Depth available is 55 & 80mm. The hinge type design provides ease of maintenance for the installer as removal of the cover is not required.





Accessories

Horizontal Cable Managers – Hinged Type - Plastic



This is available in 1U size. Total Depth available is 80mm, clear depth is 60mm.

The hinge type design provides ease of maintenance for the installer as removal of the cover is not required.





Horizontal Cable Managers – Hinged Type - Plastic

Description:-

Horizontal Cable Management System provides neat and efficient means for routing and protecting cables on 19” racks. This panel keeps your cables organised yet accessible so that moving, adding & changing are easier than ever before.

This panel is designed to satisfy current front side Only and future closet cabling needs.

The panel is made from black, high strength thermoplastic and has equally spaced mounting holes for effective cable management & cable routing. This is available in 1U size only.

This is available in 1U size. Total Depth available is 80mm, clear depth is 60mm.

The hinge type design provides ease of maintenance for the installer as removal of the cover is not required.

Order Information:-

Part Number: DLI-1U-PTCM

Technical Information:-

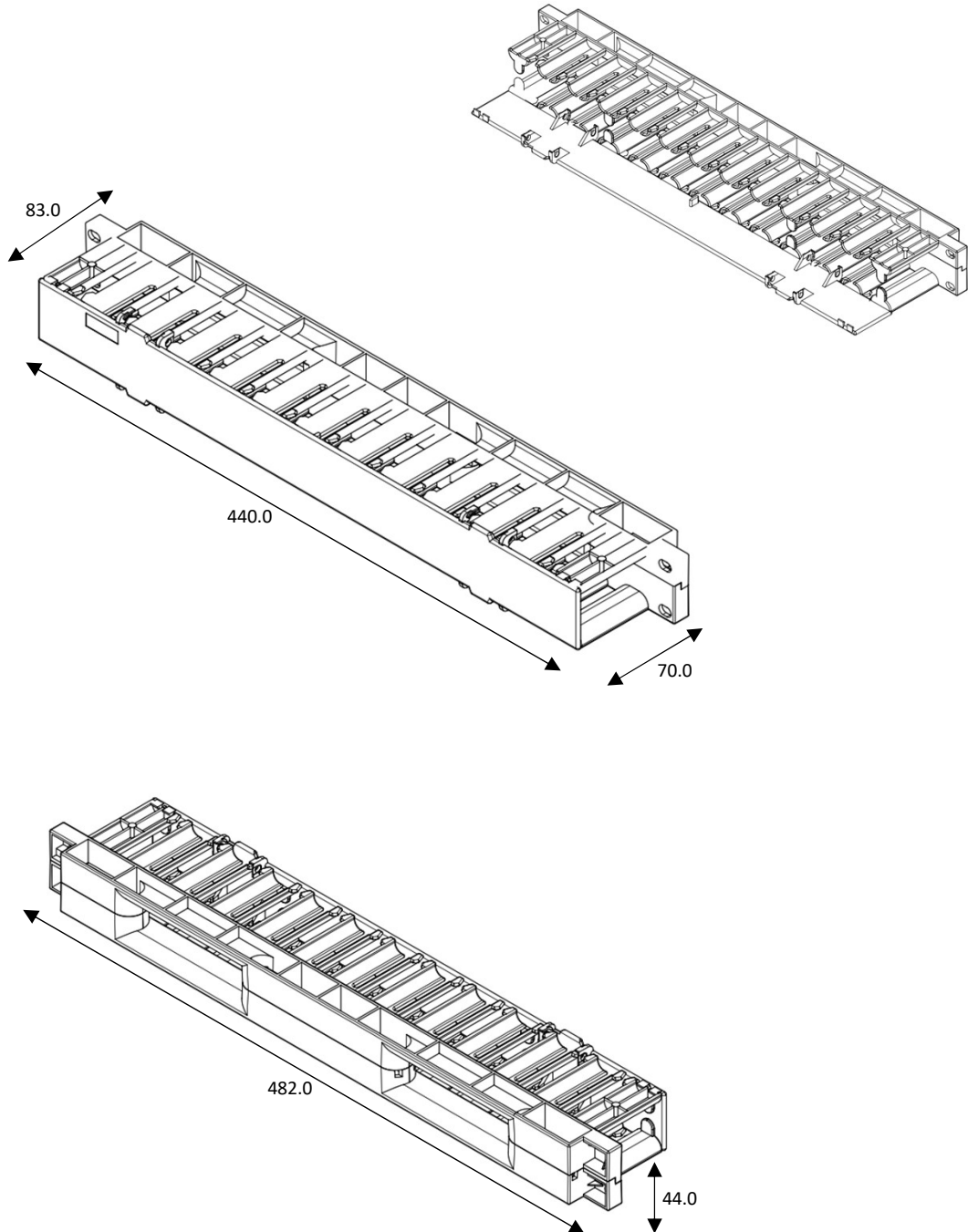
*Material Specifications – Thermoplastic (Black) RoHS compliant





Horizontal Cable Managers – Hinged Type - Plastic

*Dimensions:–





Overview of Structured Cabling

A structured wiring system offers something never possible when Ethernet was first developed: A stable wiring infrastructure capable of supporting high-speed LAN communication, with: Controlled electrical characteristics of the cables and wiring system.

Every cable terminating in a wiring closet, in which LAN hub and cable interconnection equipment can be placed. Telephone systems have used star wired topologies for more than one hundred years, with good reason. While formal specifications for structured wiring that is compatible with both high-speed LAN's and digital telephone systems have emerged only recently, the advantages of a star-wiring topology are clear. - Ease of executing moves, adds, and changes to the configuration. This is unquestionably the primary advantage of a structured wiring system.

In most organisations, there is a constant need to add users, shift users from one location to another. With a bus or daisy-chain topology (as used in coaxial Ethernet systems), any change to the configuration would require rewiring (including climbing into ceiling voids or removing permanent walls to access the cables) and network disruption (while devices are added). With a structured wiring system, every work location is prewired, thus eliminating the need for new wiring when users are added. More importantly, the configuration of the network is done at a patch panel in the wiring closet and does not require access either the user's end of the connection or the horizontal cable itself. In this manner, reconfiguration, even as extensive as a wholesale move of an entire work group, can be executed quickly, in one location, without disrupting other users of the network.





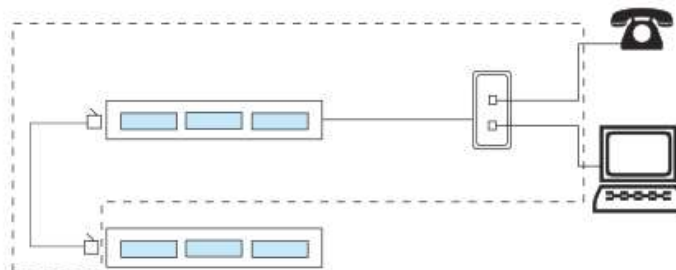
Overview of Structured Cabling

UTP is a media of choice where the environment does not contain a high level of ambient noise such as factory and electro magnetic interface (EMI) sensitive environments such as labs. CAT 5 cable with 4 individually twisted pair is recommended for horizontal section of SCS. This comprises of cable to the wall plates or surface blocks near the work stations. CAT5 UTP has proven itself as the universal medium that will carry all of our current communications applied such as voice, RS 232, token ring, 10 baseT, 100 & 1000 baseT ATM.

Essentially Structured Cabling System is a simple physical link between active components, and is comprised of unshielded twisted pair (UTP) cable or Optical Fiber Cable or is a combination of both the cables. However to facilitate the day to day operations of a normal office environment, the link must enable the user to make moves, adds and changes, whenever and wherever possible without disturbing the network. This is possible with Structured Cabling System. Further more Structured Cabling System is also universal in its ability to carry a wide variety of applications from voice and low speed data to image and high speed LAN applications.

Horizontal Cabling

Horizontal cabling is a cable run that extends from a wall outlet in an office to a termination point in a wiring closet.





Overview of Structured Cabling

Backbone Cabling

Backbone, or vertical, cabling is the cabling that runs between the Main Distribution Frame (MDF) and outlying Intermediate Distribution Frames (IDFs) . Most often this cable runs vertically between floors of a multi-storeyed building, but it may also run horizontally if the floor area is too large for service by the MDF.

Work Area

Components extend from the telecommunications closet/connect or end of the horizontal cabling to the station equipment. Required adaptors such as baluns, splitters, media filters, etc. Must be external to the telecommunications outlet/connector.

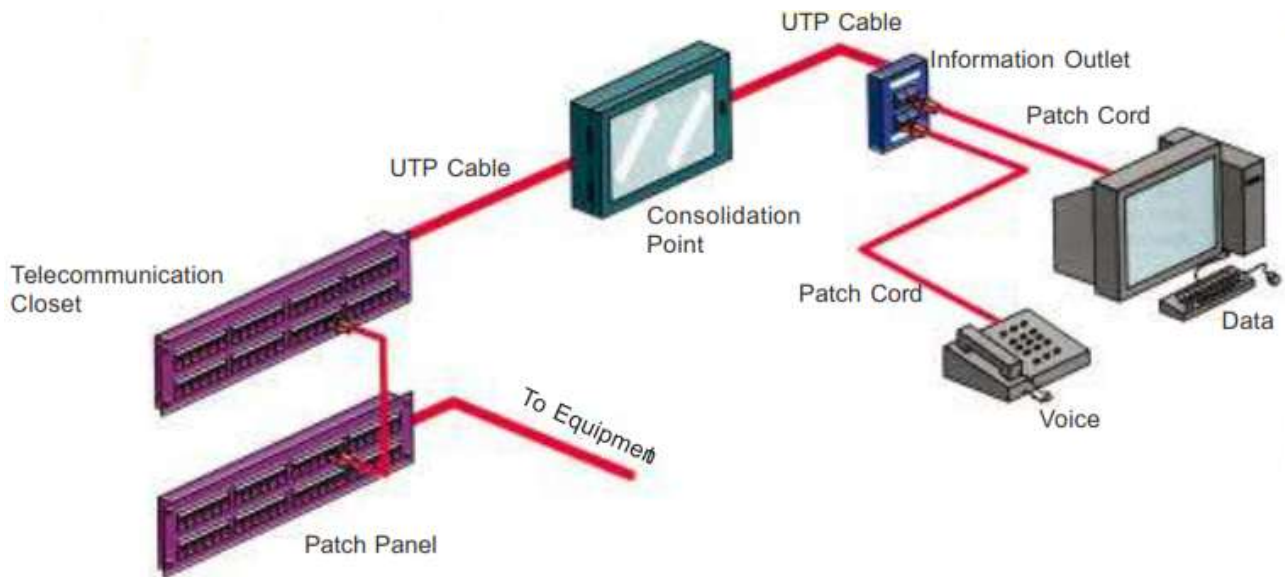
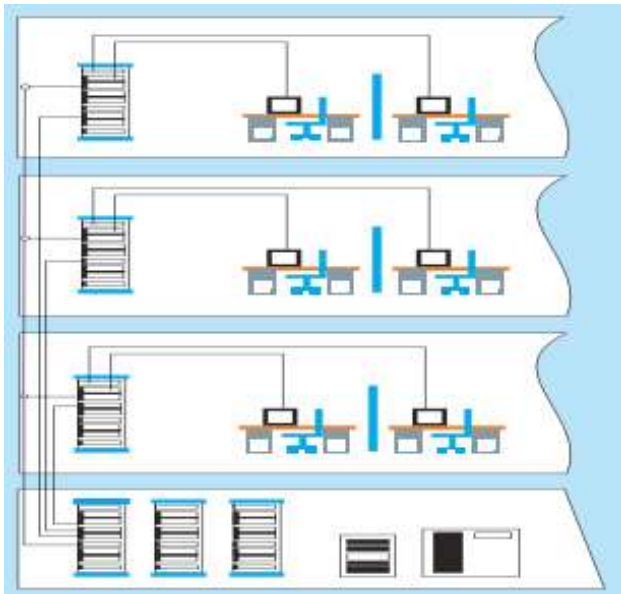
Telecommunication Closet

Telecommunication closet is to be designed and provided as per the standards. It is the primary function for horizontal distribution and may connect intermediate or main cross connects. This provides a controlled environment to house telecommunications equipment.

Equipment Room

Equipment rooms considered distinct from TCs due to the nature or complexity of equipment they contain. Equipment rooms can provide any or all of the functions of the TC. This is to be designed and provisioned as per ANSI/TIA/EIA-569. It provides a controlled environment to house telecommunications equipment, connecting hardware and splice enclosures, grounding and bonding facilities and protection apparatus where applicable. May contain either the main cross connect or intermediate cross connect and horizontal cross connect for portions of the building. It often contains network trunk / auxiliary terminations.







Overview of Structured Cabling

TIA/EIA 568 – A Commercial Building Telecommunications Cabling Standard.

Telecommunications Industries Association / Electronics Industries Association. (TIA/EIA) This Standard originated as TIA/EIA – 568 in 1991, includes cable and connecting hardware performances and additional STP specifications.

Establishment of this standard is recognized as a substantial accomplishment for it address cabling topologies, distances, channel media and connectors.

This standard addresses the following elements of building cabling.

- Horizontal Cabling
- Telecommunications Closets
- Back Bone Cabling
- Equipment Rooms
- Work Area
- Campus





Overview of Structured Cabling

TIA/EIA 568 – A Commercial Building Telecommunications Cabling Standard.

100 ohm UTP Cabling Systems

Recognised categories of cabling and connecting hardware:

Category 3: Categorized upto 10 MHz.

Applications examples:

IEEE 802.5 4Mbps annex (token ring)

IEEE 802.3 10 BASE – T

(10Mbps Ethernet)

IEEE 802.3u 100 BASE – T

(100 MbZps Ethernet)

IEEE 802.12 100 Mbps Ethernet or Token Ring

Category 4: Categorized upto 16 MHz.

Applications examples:

IEEE 802.5 16 Mbps UTP Standard

(Token Ring)

Category 5: Categorized upto 100 MHz.

Applications examples:

ANSI X3.263 100 Mbps TP – PMD (FDDI over UTP)

IEEE 802.3u 100 BASE – TX (100 Mbps Ethernet)

IEEE 802.12 100 Mbps Ethernet or Token Ring.

Category 6: Categorized upto 250 MHz.

100 Ohm balanced twisted pair

Application examples:

ANSI/CEAS-102-732-2009

Category 6A: Categorized upto 500 MHz.

100 Ohm balanced twisted pair

Application examples:

ANSI/CEAS-102-732-2009





Overview of Structured Cabling

TIA/EIA 569 Commercial Building Telecommunications Pathway & Space.

This standard originated in the year 1990 & is a result of the joint effort of CSA (Canadian Standards Associations) & EIA.

This standard address the following elements of Building pathways & Spaces:

- Horizontal Pathways
- Telecommunications Closets
- Back Bone Pathways
- Equipment Rooms
- Work Stations.

IA/EIA- 606 The Administration Standard For The Telecommunications Infrastructure Of Commercial Buildings.

Designed to provide a uniform administration scheme for the telecommunications infrastructure that is independent of applications. Intended to reduce the large number of incompatible and incomplete administration approaches in existence.

Telecommunications administration Areas.

- Terminations
- Media
- Pathways
- Spaces
- Bonding/Grounding.





Overview of Structured Cabling

Application Standards / Basic topologies

The term topology refers to the physical or logical arrangement of a telecommunications system. Star topology: A star topology utilizes a central point of control. Each station or device in the telecommunication system communicates via point to point wiring to this central link. In most situations, address recognition is the responsibility of the central control point which then directs the information to the cabling path of the device associated with that address.

A star topology is considered the easiest to design and install since each station's cabling is run directly out from the central location to the appropriate work area.

Token Ring: Token Ring is a 4 Mbps or 16Mbps LAN based on the IEEE 802.5 standard. While this is a logical ring topology, the physical cabling is typically designed through the use of a MAU (multi station access unit) Original specifications called for 150 OHM shielded twisted pair. Today 100OHM unshielded twisted pair is commonly used.

ATM

Asynchronous Transfer Mode (ATM) is an evolving wide and local area network standard for total information transport. ATM is a cell-based packet switching protocol (OSI Layer Two) that is capable of supporting multimedia traffic at multi-gigabit speeds in the same transmission. ATM runs on fibre-optic or twisted pair media. It offers universal, service-independent switching and multiplexing capabilities.





Overview of Structured Cabling

100 Base-T

The IEEE 802.3 100BASE-T specification is the standard for Ethernet communications at 100 Mbps over 100 ohm Unshielded Twisted Pair (UTP) cabling. The IEEE 802.3 10BASE-T specification is the standard for Ethernet communications at 10 Mbps over Unshielded Twisted Pair (UTP) cabling.

100 BASE-T Option A

The second section of the 100BASE-T standard is known as 100BASE-TX. 100BASE-TX is a specification for 100Mbps Ethernet over 2 pairs of UTP cabling. This format is illustrated below. This specification also provides for the use of 2 pairs of fibre as an alternative to UTP for transmission of Ethernet signals. We provide a wide range of copper and fibre products that meet the needs of the 100BASE-TX fibre specification.

100 BASE-T Option B

The standard is divided into two sections each using different active components. The first section, known as 100BASE-T4, is a specification for 100Mbps Ethernet over 4 pairs of Category 3, 4, 5 or higher UTP cabling. Twenty-five pair PowerSum compliant Category 5 cables can be used as long as they are terminated onto IDC contacts on each end.

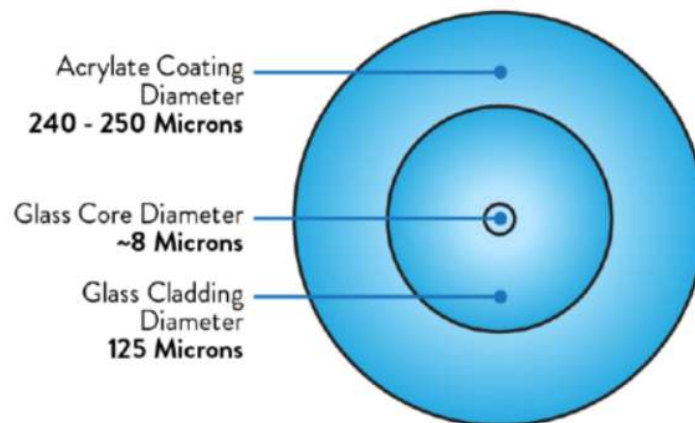




Overview of Structured Cabling

Optical fiber cabling system

Optical fiber truly is the ultimate communication medium. It is compact and easy to install. It has enormous bandwidth. It is completely immune to EMI and RFI. It doesn't require special routing in the office. And it is becoming more affordable. Optical fiber is available in 2 fundamental forms – single mode and multimode. Traditionally single mode has been used by the phone companies for long distance trunks, whilst Multimode has been used by companies for inhouse communications.



Multimode or Singlemode?

There are two general types of fiber available for use in data communications networks today— multimode and single mode. These two fiber types have several characteristics that differentiate them from each other. Before getting into the different types of fiber, let's review a few facts that apply to optical fiber in general. All fiber is made up of three general parts— the core, cladding, and coating. The cladding layer is made of pure silica and has a lower refractive index than the core. This difference in refractive index is what allows the light to travel within the core. The core/ cladding interface acts like a mirror to keep the light from refracting out of the fiber. Optical fiber works because of this principle of total internal reflection.





Overview of Structured Cabling

Multimode

As the name suggests, multi mode fiber is designed to support many modes or rays of light. Multimode fiber is available in several core sizes, each having characteristics that make it appropriate for different network needs. Fiber core size is measured in microns and multimode fiber is specified by its core size. Available today are 50mm, 62.5mm and 100mm multimode fibers. The most common fiber and the one recommended in ANSI X3T9.5 for FDDI (Fiber Distributed Data Interface) networks is 62.5mm fiber. The core size represents the nominal diameter of the core of the fiber. The cladding diameter of the fiber is the industry standard 125mm. This fiber is often represented with this nomenclature: 62.5/125mm. The properties of the 62.5/125mm fiber make it easy to work with while providing excellent optical characteristics. This multimode fiber is not very sensitive to stress like some other fiber designs, and is available with a variety of attenuation and bandwidth specifications.

Single Mode

Singlemode fiber has been used for long distance networks for some time and has become more popular in data communications over the last few years. As the name suggests, singlemode fiber is designed to support one mode of light. It is used with a very narrow laser source and can carry large amounts of information over long distances. Its core size is typically between 8.5 and 9.5mm and cladding diameters are the standard 125mm. With singlemode fiber, the mode field diameter (MFD) is specified in lieu of a core size requirement. The MFD is slightly larger than the core and represents the actual diameter of the light mode propagating through the fiber. Singlemode fiber is chosen for its unlimited bandwidth and extremely low attenuation values. It is ideal for transmitting long distances, often up to 50 kilometers or more without requiring a repeater.





Overview of Structured Cabling

Attenuation

Attenuation is defined as the amount of light loss along a length of fiber. It is expressed as decibels (dB) and is usually normalized to a kilometer.

Therefore, an attenuation value for multimode fiber might be 3.0dB/km.

Attenuation is a logarithmic function and 3.0dB represents a 50% signal loss, in this case, over a kilometer of fiber. Glass fiber has transmission properties that vary with the wavelength of light. Some wavelengths are absorbed more while others are reflected. The two standard transmission wavelengths for multimode fiber are 850nm (nanometers) and 1300nm.

LED sources that transmit at 850nm are fairly inexpensive and often meet the requirements of shorter data network installations. Typical fiber optic cable attenuation specifications at the 850nm wavelength (often referred to as the “850 window”) would be between 3.0 and 4.0 dB/km.

Specifications for the 1300nm window would often be between 1.0 and 1.5 dB/km.

Fiber Standards & Specifications ANSI / EIA / TIA

There are a large number of documents published under this combination of standards groups that define appropriate fiber, cable and electronics to be used in order to meet various network requirements. There are also a series of fiber optic test procedures (FOTPs) for all optical, environmental and physical testing that most suppliers use when qualifying their products.

ANSI / TIA / EIA-568A

ANSI/TIA/EIA-568A defines commercial building wiring standards for fiber optic cable, connectors, splices and network topology. Many system designers make these specifications and the tests a requirement when purchasing optical components.





Overview of Structured Cabling

Bandwidth

Fiber bandwidth is a specification that defines the transmission carrying capacity of the fiber. It is expressed in MHz*km and is typically one of the most difficult characteristics to understand. The bandwidth of a fiber is limited due to dispersion. Dispersion is the spreading and/or distortion of a light pulse as it travels from the transmitter end of the fiber to the receiver end.

FDDI

The Fiber Distributed Data Interface specification is often thought of as the name of a standard. FDDI is often used as a backbone network for lower speed networks like Ethernet or Token Ring. FDDI is a high speed fiber optic network consisting of dual counter-rotating rings and bypass switches. FDDI system specifications include a 100 Mbps data rate and a maximum distance between nodes of 2 km (multimode fiber). The fiber requirements are for 62.5/125 mm fiber size with a minimum bandwidth of 500 MHz*km at the 1300 nm operating window.

ISO / IEC

These international standards are similar in nature to the EIA/TIA documents often referred to in domestic network designs. In particular ISO/IEC 11801 is very similar to TIA/EIA-568A. However, there are differences that you should be aware of before you design or install a fiber based system to ISO/IEC 11801 standards. But, by and large, 568A and 11801 are harmonized to a large extent.



Overview of Structured Cabling

Ethernet 10 Base

100base-T wiring specifies an 8 position jack two pair. These are pairs two and three of AT&T and TIA schemes.

IBM Token Ring.

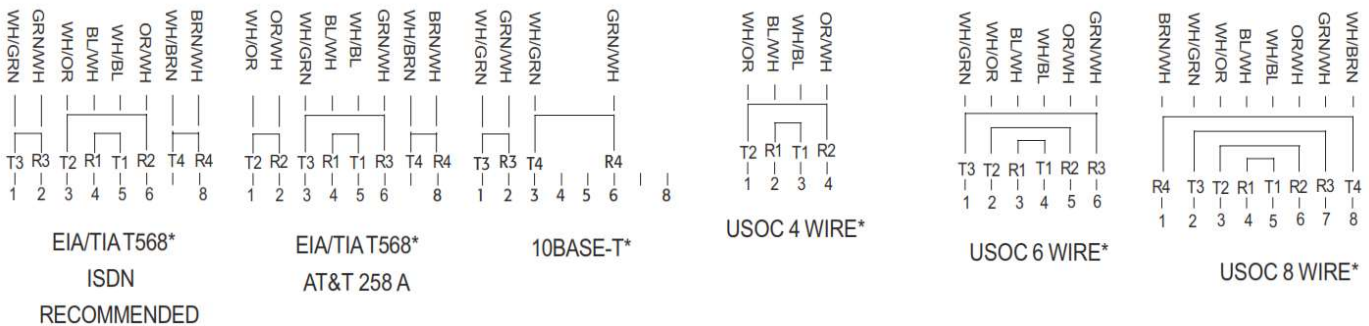
Token Ring usually uses an 8 position jack. The wiring schemes is compatible with TIA, AT&T and USOC wiring schemes because it uses the two center pairs.

USOC

The USOC wiring scheme has four versions supporting 1, 2, 3, and 4 pair systems. Pair one is on the two center contacts, pair two is on the next two contactors and so forth.

EIA & AT&T

EIA/AT&T T568 has adopted the TIA and AT&T wiring schemes. They are similar, but pair two and three are reversed. The TIA scheme is popular because it is compatible with one or two pair USOC systems. Both schemes will support ISDN application.

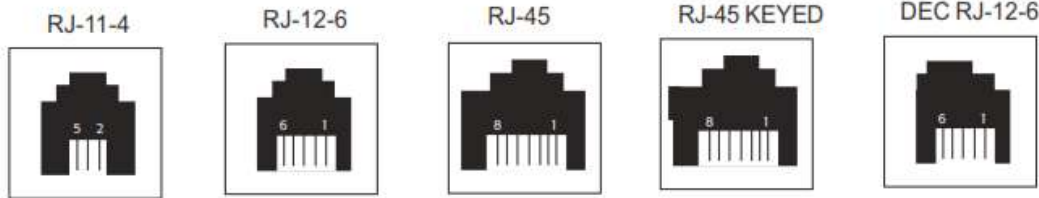




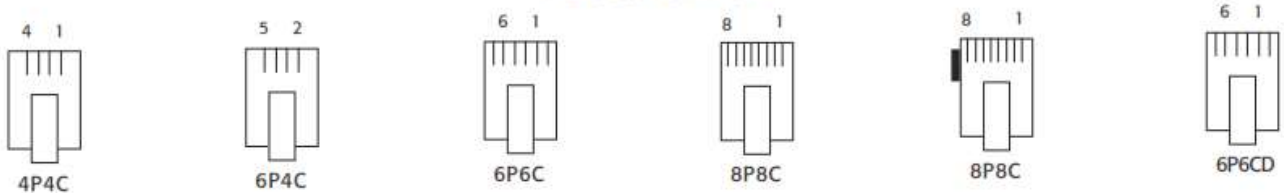
Overview of Structured Cabling

Modular Jack & Plug Assignments

JACKS

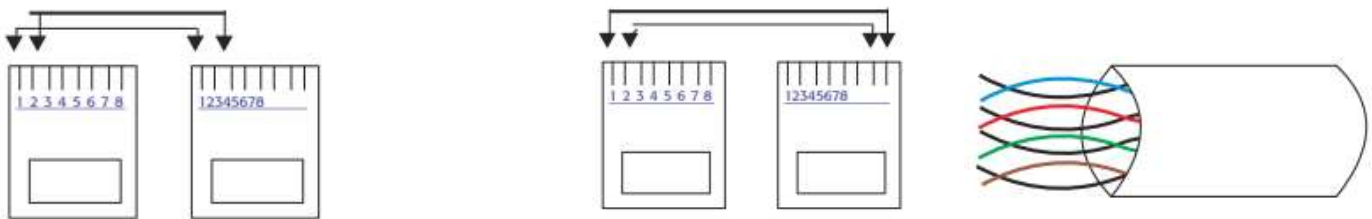


PLUGS-CLIP UP



Modular Cord Wiring

To identify whether an individual patch cord is wired straight through or cross-over, hold the plug at either end of the cable aligned side by side with the contacts facing you (up), the clip down and compare the wire colors from left to right.



"Straight-through"

"Cross Over"

Pin 1 to Pin 1	Pin 5 to Pin 5	Pin 1 to Pin 8	Pin 5 to Pin 4
Pin 2 to Pin 2	Pin 6 to Pin 6	Pin 2 to Pin 7	Pin 6 to Pin 3
Pin 3 to Pin 3	Pin 7 to Pin 7	Pin 3 to Pin 6	Pin 7 to Pin 2
Pin 4 to Pin 4	Pin 8 to Pin 8	Pin 4 to Pin 5	Pin 8 to Pin 1

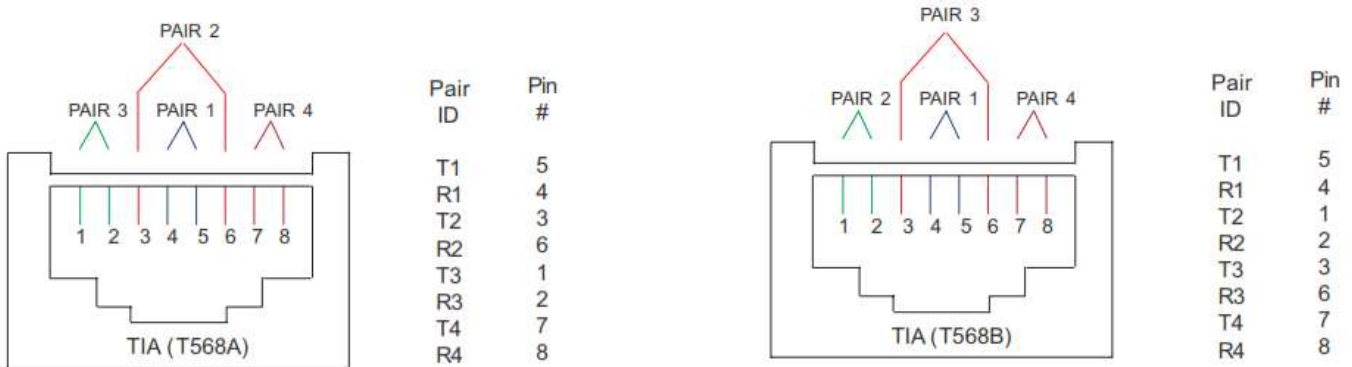
Pair1
Pair2
Pair3
Pair4





Overview of Structured Cabling

Common Wiring Configuration



The TIA and AT&T wiring schemes are the two that have been adopted by EIA/TIA-568A. They are nearly identical except that pairs two and three are reversed. TIA (T568A) is the preferred scheme because it is compatible with 1 or 2-pair USOC Systems. Either configuration can be used for integrated Services Digital Network (ISDN) application.





To place your order, please email natasha@deltalinc.in,
kns@deltalinc.in with the following details:

Product Name:

Quantity:

Colour Specification: If applicable

We will get back to you with a quotation

