

# Collective of Copper System Products

## 1. Product Overview



**Copper Patch Cords**

Designed to ensure the highest levels of performance, reliability, and longevity, and are ideal for large enterprise and small business.



**Cable Trunks**

Factory terminated and tested, and are ideal for data centers, enterprise networks, and other applications where installation speed is important.



**Bulk Copper Cables**

Offering various flame ratings and constructions, they are ideal for office cabling, hotel decoration, data center, etc.



**Industrial Copper Systems**

With validated architectures, these industrial copper products can be used for harsh environmental conditions.



**Cable Management**

Provide various cable management products, they are easy to install, and adaptable to a variety of applications.



**Patch Panels**

Keep your data center or server room organized as well as make it much easier to move, add or change the cabling infrastructure.



**Faceplates & Boxes**

Available in a variety of styles and port configurations to meet all work area outlet needs.



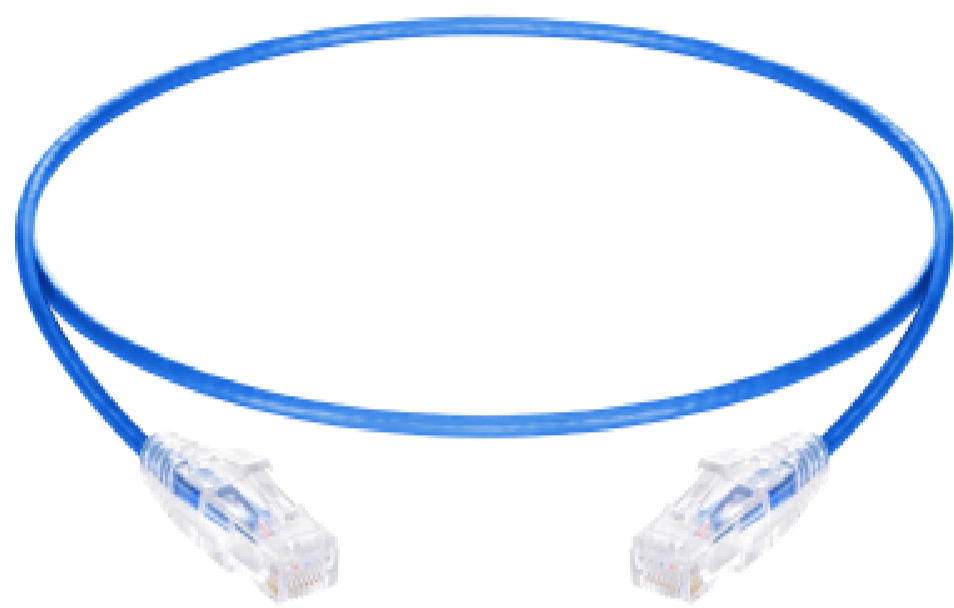
**Connectors & Jacks**

Available in various performance levels for UTP and shielded applications, and are ideal for voice, home networking, etc.

## 2. Hot Products Introduction

### Cat6 Slim Patch Cable

The Cat6 slim patch cable is the perfect solution for high density data center applications. Its compact 28AWG design simplifies installation and management. Smaller patch lead size helps alleviate congestion as well as improving airflow within the racks.



- 28AWG Cable and Snagless Narrow Boot Design Takes Less Space Than 23~24AWG Cables
- Exceed ANSI/TIA-568.2-D Category 6 and ISO 11801 Class E Standards
- Up to 550MHz with 1G/10G-T Speed, Support PoE/PoE+/PoE++ (IEEE 802.3af/at)
- Performance Tested with Fluke and Wired T568B
- Stranded Cable and RJ45 Modular Plugs with 50μ" Gold-plated
- Pure Bare Copper Conductors with Stable Transmission Performance
- Helps Reduce Congestion in High-density Data Centers and Telecommunications Rooms
- Variety of Cable Colors and Lengths to Meet Individual Requirements and System Flexibility

### Cat6a Patch Cable

Cat6a network patch cable is the cost-effective solution for indoor data center applications, supporting up to 10GBase-T and 550MHz within 100 meters of cable. And it is fully backward compatible with all the previous categories.



- Exceed ANSI/TIA-568.2-D Category 6A and ISO 11801 Class E Standards
- Up to 550MHz with 10G-T Speed, Support PoE/PoE+/PoE++ (IEEE 802.3af/at/bt)
- SFTP Cable Minimizes EMI and RFI Interference
- Performance Tested with Fluke and Wired T568B
- Strain Relief and a Flexible Boot Simplify Moves, Additions and Changes
- Stranded Cable and RJ45 Modular Plugs with 50μ" Gold-plated Contacts
- Use in Patch Panel or Equipment Connections in Enterprise Networks and Data Center
- Support Current and Future Category 6a/6/5e/5 Applications

## Cable Manager

Horizontal cable managers shall be capable of managing cables on the front and rear of any 19" rack. They ensure optimal cable radius to prevent deterioration or breakage. Flexible fingers maximize the care and protection of the equipment and cables, keeping the structured cabling system unhurt and totally functional. The removable cover makes it easy to add or remove bundled cables quickly.



- Mount to Any EIA 19" Rack or Cabinet in Data Centers and Telecom Room
- Flexible Fingers Organize Patch Cords, Simplifying Moves, Adds, and Changes
- Finger Spacing Provides a Large Area for Copper, Fiber Optic, and Coax Cables
- Rounded Edges on Fingers Protect Cables from Snags and Damage to the Cable
- Dual Hinged Cover Opens Upward or Downward to Provide Easy Access to Cables
- The Bend Radius Control Helps Protect Cables from Kinks and Snags
- Cable Pass Through Holes Provide Ease of Installation and Cable Maintenance

## Cat6 Patch Panel

24-port Cat6 patch panel for high density and easy patching solutions in data centers. The Cat6 Ethernet patch panel is designed for use in 19" racks and ideal for 10/100/1000Base-T and 10GBase-T Ethernet applications. It bundles the networks together to connect incoming and outgoing lines and improve the organisation of a wired network.



- Mount to Any EIA 19" Rack or Cabinet in Enterprise Networks and Data Center
- UTP Couplers Snap In and Out of the Patch Panel for Easy Moves, Adds and Changes
- Can Be Clearly Identified with Optional Labels and Icons for Port Identification
- ISO/IEC11801 and TIA/EIA568 Standards at Swept Frequencies 1 to 250 MHz
- Backwards Compatible with 6/8p RJ45 UTP Patch Cords with T568A/B Wiring Schemes
- Support POE/POE+ (IEEE 802.3af/at)
- Detachable Rear Strain Relief Bars Help Support and Manage cables

## Faceplate

The keystone wall plate is designed to support the distribution of voice, data, and other communication needs to the work area for commercial or residential applications. It can accept keystone modules such as data, voice, audio and video. Keystone wall plates are available in many ports and sizes to fit your needs.



- Mount to Back Box and Compatible with Keystone Modules
- Eliminate Cluster of Wires and Hide Them Behind Wall
- Classic White Color Blends Elegantly into Home or Office Decor
- Standard Size and with Screws, Easy to Install Directly
- Ideal for Home Theater, VoIP or Ethernet In-wall Wiring Installations



## Keystone Jack

Cat6a STP RJ45 Toolless Keystone Jack Module is designed to terminate 4-pair, 22-26 AWG twisted pair cable. Each module is factory tested to exceed industry standard performance requirements. Contacts are plated with 50 microinches of gold for superior performance. Jacks are individually serialized and are compatible with keystone interfaces such as faceplates, modular patch panels and surface mount boxes.



- Support IEEE 802.3af/at/bt, Verified IEC 60512-99-001 & IEC 60512-99-002 Test
- The Shielded Keystone Jack, Against EMI/RFI, Next, and Axt
- Fast Installation Without Any Special Punch Tool or Crimping Tool
- Dual-color-coded Labeling for T568A/B (258A) Wiring Schemes
- Gold-plated RJ45 Contacts for Optimal Conductivity
- To Be Used with Keystone Wall Plate or Panel



### 3. Copper Systems















#### 3.1 Copper Patch Cords

Categories	Cat5e	Cat6	Cat6a	Cat7	Cat8
Shielding Type	UTP F/UTP	UTP S/FTP	UTP S/FTP	S/FTP	S/FTP
Cable Jacket	PVC PVC CM LSZH	PVC PVC CM PVC CMP LSZH	PVC CM PVC CMP LSZH	PVC CM	PVC CM
Length	6in-197ft (0.15m-60m)	6in-75ft (0.15m-22.9m)	6in-150ft (0.15m-45.7m)	3ft-25ft (0.9m-7.6m)	3ft-35ft (0.9m-10.7m)
Gauge (AWG)	24/26	23/24/26/28/32	23/24/26/28	26	28
Color	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: blue; margin-right: 5px;"></span> Blue</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: white; margin-right: 5px;"></span> White</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: yellow; margin-right: 5px;"></span> Yellow</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: gray; margin-right: 5px;"></span> Gray</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: purple; margin-right: 5px;"></span> Purple</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: black; margin-right: 5px;"></span> Black</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: red; margin-right: 5px;"></span> Red</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: green; margin-right: 5px;"></span> Green</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: pink; margin-right: 5px;"></span> Pink</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: orange; margin-right: 5px;"></span> Orange</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: blue; margin-right: 5px;"></span> Blue</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: white; margin-right: 5px;"></span> White</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: yellow; margin-right: 5px;"></span> Yellow</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: gray; margin-right: 5px;"></span> Gray</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: black; margin-right: 5px;"></span> Black</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: red; margin-right: 5px;"></span> Red</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: green; margin-right: 5px;"></span> Green</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: black; margin-right: 5px;"></span> Black</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: blue; margin-right: 5px;"></span> Blue</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: gray; margin-right: 5px;"></span> Off-White</li> </ul>
Package Form	1/5/10 PCS/Pack	1/5/10 PCS/Pack	1 PCS/Pack	1 PCS/Pack	1 PCS/Pack
Certification	ROHS, CE	ROHS, CE	ROHS, CE	ROHS, CE	ROHS, CE

### 3.2 Cable Trunks

Categories	Cat5e		Cat6			Cat6a	
Shielding Type	UTP		UTP			SFTP	
Termination End	6 Plug to 6 Plug	6 Jack to 6 Jack	6 Plug to 6 Plug	6 Jack to 6 Jack	12 Plug to 12 Jack	6 Plug to 6 Plug	6 Jack to 6 Jack
Cable Jacket	PVC CMR		PVC CMR			PVC CMR	
Length	10ft-23ft (3m-7m)	10ft (3m)	10ft-99ft (3m-30m)	10ft-82ft (3m-25m)	13ft (4m)	10ft-99ft (3m-30m)	10ft-66ft (3m-20m)
Gauge (AWG)	24		26	23	26	26	23
Cable Color	 Blue		 Blue			 Blue	 Off-White
Standard	ISO/IEC 11801, ANSI/TIA-568-C.2						

### 3.3 Bulk Copper Cables

Categories	Cat5e	Cat6	Cat6a	Cat7	Outdoor	Industrial
Shielding Type	UTP F/UTP SF/UTP	UTP F/UTP SF/UTP	UTP SF/UTP	SF/UTP	UTP F/UTP	SF/UTP S/FTP
Cable Jacket	PVC CM PVC CMR PVC CMP	PVC CM PVC CMR PVC CMP	PVC CMR	PVC CMR	PVC and LDPE	PUR
Length	1000ft (305m)	1000ft (305m)	1000ft (305m)	1000ft (305m)	1000ft (305m)	1000ft (305m)
Gauge (AWG)	24/26	23/24/26	23	23	23/24	26
Conductor Type	Solid Stranded	Solid Stranded	Solid	Solid	Solid	Stranded
Color	 Blue  White  Yellow  Gray  Orange	 Black  Red  Green  Purple	 Blue  Gray	 Blue	 Black	 Water Blue

## 4. Cable Managers

### 4.1 Horizontal Cable Managers

Product Type	D-Rings			Brush Strip	Finger Duct		Lacer-Bar
Rack Spaces	0U 1U	1U	1U	1U	1U 2U	1U	0U
Single/Double Sided	Single Sided			Single Sided	Single Sided	Double Sided	/
Finger Type	D-Ring	Brush Strip	Side Ring	/	T type	T type	L type
Dimensions (HxD)	1.73x4.29in (44x109mm) 1.75x3.01in (44.5x76.5mm) 1.73x3.37in (44.0x85.5mm)	1.73x3.46in (44x88mm)	1.73x3.46in (44x88mm)	1.73x0.37in (44x9.5mm)	1.73x3.43in (44.0x87.0mm) 3.48x3.43in (89x87mm)	1.73x6.85in (44x174mm)	0.71x4.02in (18.0x102.0mm)
Width	19.00in (482.6mm)	19.00in (482.6mm)	19.00in (482.6mm)	19.00in (482.6mm)	19.00in (482.6mm)	19.00in (482.6mm)	19.00in (482.6mm)
Material	Steel Plastic	Steel	Steel	Steel	ABS	ABS	Steel

### 4.2 Vertical Cable Managers

Product Type	D-rings	Bend Radius Finger			
Rack Spaces	1U	5U	42U	45U	45U
Single/Double Sided	Single Sided	Single Sided			Double Sided
Finger Type	D-Ring	T type	T type	L type	L type
Width	1.6in (40mm) 3.2in (80mm)	1.02in (26.0mm)	3.5in (88.9mm)	4.9in (125mm)	4.9in (125mm)
Depth	3.2in (80mm)	3in (84.0mm)	6.0in (152.6mm)	6.5in (165mm)	12 in (310mm)
Material	Steel	ABS	SPCC	ABS	ABS

## 5. Patch Panels

Categories	Cat5e		Cat6			Cat6a		Blank	
Shielding Type	UTP STP	UTP	UTP STP	UTP	UTP	STP	UTP	UTP STP	UTP
Termination	Couple	Punchdown	Couple	Punchdown		Couple	Punchdown	/	/
Shape	Flat	Flat	Flat	Flat	Angled	Flat	Flat Angled	Flat	Angled
Rack Spaces	1U		1U	1U	1U	1U/2U	2U	1U	1U
Ports	24		12	24 48	24	24	48	24	24
Material	SPCC + ABS		SPCC + ABS		SPCC	SPCC + ABS		SPCC + ABS	SPCC
Wiring Scheme	T568A/T568B		T568A/T568B			T568A/T568B		T568A/T568B	

## 6. Faceplates & Boxes

Categories	Faceplates		Surface Mount Boxes	Faceplate Frame		Accessories	
Type	Faceplate	Label Pockets Identification Icons	Unloaded Cat6 Unshielded Cat6 Shielded Cat6a Shielded	Insert	Frame	Back Box	Blank Insert
Number of Ports/ Gang Opening Type	1/2/3/4	1/2/3/4/6	1/2	1/2/3/4/6/ Brush/Blank	Single Gang Double Gang	/	/
Dimensions (HxW)	4.5"x2.75" (114x70mm)	4.49"x2.76" (114x70mm)	1.10"x1.90" (27x48.2mm) 1.10"x2.99" (27x76mm) 0.98"x1.94" (25x49.2mm) 1.04"x2.44" (26.4x62mm)	4.09"x1.40" (104x35.6mm) 4.09"x1.79" (104x45.4mm)	4.87"x2.95" (123.8x75mm) 4.87"x4.94" (123.8x125.5mm)	1.38"x2.83" (35x72mm)	/
Terminals	RJ45 Ethernet		RJ45 Ethernet HDMI USB	RJ45 Ethernet		/	/
Material	High-strength PC	ABS	PC/ABS	ABS		ABS	ABS

## 7. Accessories

### 7.1 Inline Couplers

Categories	Cat5e	Cat6	Cat6a
Shielding Type	UTP/STP	UTP/STP	UTP/STP
AWG	22-26AWG	22-26AWG	22-26AWG
Copper Wire Type	Stranded Solid	Stranded Solid	Stranded Solid
Color Code	T568A/T568B	T568A/T568B	T568A/T568B
Keystone Type	180°	180°	180°
Termination Type	Coupler	Coupler	Coupler
Available Colors			
Package Form	1PCS/Pack 12PCS/Pack	1PCS/Pack 12PCS/Pack	1PCS/Pack









### 7.2 Keystone Jacks

Categories	Cat5e	Cat6	Cat6a	Cat7
Shielding Type	UTP	UTP/STP	UTP/STP	STP
AWG	22-26AWG	22-26AWG	22-26AWG	23-26AWG
Copper Wire Type	Stranded Solid	Stranded Solid	Stranded Solid	Stranded Solid
Color Code	T568A/T568B	T568A/T568B	T568A/T568B	T568A/T568B
Keystone Type	180°	180°	180°	180°
Termination Type	Toolless Punch Down	Toolless Punch Down	Toolless Punch Down	Toolless
Available Colors				
Package Form	10PCS/Pack	1/10PCS/Pack	1PCS/Pack	1PCS/Pack

### 7.3 Connectors/Plugs

Categories	Cat5e	Cat6	Cat5e/6/6a	Cat6a/7
Shielding Type	UTP/STP	UTP/STP	UTP/SFTP	STP
AWG	23/24/26AWG	23-24AWG/26AWG	23-26AWG	23AWG
Copper Wire Type	Stranded Solid	Stranded Solid	Stranded Solid	Stranded Solid
Termination Type	Coupler Toolless Punch Down	Coupler Toolless Punch Down	Coupler Toolless Punch Down	Coupler Toolless Punch Down
Material	Plastic Housing Full Metal	Plastic Housing Full Metal	Plastic Housing Full Metal	Full Metal
Operating Temperature	-40°C to 85°C	-40°C to 85°C	-20°C to 65°C -40°C to 85°C	-40°C to 85°C
Package Form	50PCS/Pack	50PCS/Pack	10PCS/Pack	50PCS/Pack









### 7.4 Boot Covers

Categories	Cat5e	Cat6	Cat5e/Cat6/Cat6a/Cat7	Cat5e-Cat8
Shielding Type	UTP/STP	UTP/STP	UTP	UTP/STP
AWG	24AWG/24-26AWG	23-24AWG/26AWG	23/24AWG	/
Cable Outer Diameter	5.5mm/5.8mm/6.5mm	6.0mm/6.0-6.5mm	5.5mm/6.5mm/8mm	5.5-7.5
Color	 Blue  Gray  Black Transparent	 Blue  Gray  Black Transparent	 Blue	 Blue
Material	Plastic	Plastic	Plastic	Plastic
Package Form	50PCS/Pack	50PCS/Pack	50PCS/Pack	50PCS/Pack

### 7.3 Connectors/Plugs

Categories	Cat5e	Cat6	Cat5e/6/6a	Cat6a/7
Shielding Type	UTP/STP	UTP/STP	UTP/SFTP	STP
AWG	23/24/26AWG	23-24AWG/26AWG	23-26AWG	23AWG
Copper Wire Type	Stranded Solid	Stranded Solid	Stranded Solid	Stranded Solid
Termination Type	Coupler Toolless Punch Down	Coupler Toolless Punch Down	Coupler Toolless Punch Down	Coupler Toolless Punch Down
Material	Plastic Housing Full Metal	Plastic Housing Full Metal	Plastic Housing Full Metal	Full Metal
Operating Temperature	-40°C to 85°C	-40°C to 85°C	-20°C to 65°C -40°C to 85°C	-40°C to 85°C
Package Form	50PCS/Pack	50PCS/Pack	10PCS/Pack	50PCS/Pack

### 7.4 Boot Covers

Categories	Cat5e	Cat6	Cat5e/Cat6/Cat6a/Cat7	Cat5e-Cat8
Shielding Type	UTP/STP	UTP/STP	UTP	UTP/STP
AWG	24AWG/24-26AWG	23-24AWG/26AWG	23/24AWG	/
Cable Outer Diameter	5.5mm/5.8mm/6.5mm	6.0mm/6.0-6.5mm	5.5mm/6.5mm/8mm	5.5-7.5
Color	 Blue  Gray  Black Transparent	 Blue  Gray  Black Transparent	 Blue	 Blue
Material	Plastic	Plastic	Plastic	Plastic
Package Form	50PCS/Pack	50PCS/Pack	50PCS/Pack	50PCS/Pack