

# Mini-Com® TX6A™ 10Gig™ UTP Jack Modules with MaTriX Technology

## specifications


Category 6A/Class E<sub>A</sub>, 8-position, UTP jack module shall terminate 4-pair, 22 – 26 AWG, 100 ohm unshielded twisted pair cable and shall not require use of a punchdown tool. UTP jack modules shall use a forward motion termination method to optimize performance by maintaining cable pair geometry while eliminating conductor untwist. The patent pending matrix split foil tape shall suppress the effects of alien crosstalk, allowing 10 Gb/s transmission even in high density 48-port, 1RU patch panels. The termination cap shall be color-coded blue to designate Category 6A performance and shall include a universal label coded for T568A and T568B wiring schemes. The Mini-Com® TX6A™ 10Gig™ UTP Jack Module must be installed as part of the TX6A™ 10Gig™ UTP Copper Cabling System to achieve IEEE 10GBASE-T certified performance.



## technical information

<b>Category 6A/Class E<sub>A</sub> channel and component performance:</b>	Exceeds channel requirements of ANSI/TIA-568-C.2 Category 6A and ISO 11801 Class E <sub>A</sub> standards for supporting 10GBASE-T transmission over twisted pair cabling systems in a 4-connector configuration up to 100 meters at swept frequencies 1 to 500 MHz Exceeds component requirements of ANSI/TIA-568-C.2 Category 6A and ISO 11801 Class E <sub>A</sub> standards at swept frequencies 1 to 500 MHz
<b>FCC and ANSI compliance:</b>	Meets ANSI/TIA-1096-A contacts plated with 50 microinches of gold for superior performance
<b>IEC compliance:</b>	Meets IEC 60603-7
<b>RoHS compliance:</b>	Compliant
<b>PoE compliance:</b>	Meets IEEE 802.3af and IEEE 802.3at for PoE applications
<b>UL rated:</b>	UL1863 approved
<b>Headroom warranty:</b>	Guaranteed performance beyond the standard when a complete end-to-end TX6A™ 10Gig™ UTP Copper Cabling System is installed by a Panduit certified installer
<b>Conductor termination range:</b>	Wire cap compatible with 22 – 26 AWG solid or stranded cable with conductor insulation diameters of 0.060 in. max and overall cable O.D. 0.200 in. to 0.330 in.

## key features and benefits

<b>Interoperable</b>	Compatible with components of the TX6A™ and TX6A-SD™ 10Gig™ UTP Copper Cabling System with MaTriX Technology (100 and 70 meter solutions) for increased design flexibility
<b>Alien crosstalk suppression</b>	Innovative MaTriX split foil technology provides superior alien crosstalk performance enabling high density applications (48-ports, 1 RU)
<b>Advanced electrical compensation technology</b>	Headroom over industry standards for lower risk and higher bandwidth network availability
<b>100% performance tested</b>	Confidence that each jack module will deliver the critical electrical performance requirements
<b>Superior headroom warranty</b>	Provides the highest margins above the industry standard for both electrical and alien crosstalk performance
<b>Utilizes enhanced Giga-TX™ Technology</b> 	Optimizes performance by eliminating conductor untwist and reduces installation time and expense
<b>Utilizes Flex technology</b>	Shortens the tuning length of the jack module enabling higher performance
<b>Improved termination cap</b>	Conductor retention slots simplify jack module termination
<b>Modular</b>	UTP jack modules snap in and out of all Mini-Com® Faceplates, Modular Patch Panels and Surface Mount Boxes for easy moves, adds, and changes
<b>True strain relief</b>	Controls cable bend radius for long term installed performance
<b>Individually serialized</b>	Marked with quality control number for future traceability
<b>RJ45 interface</b>	Industry standard interface provides a quick and easy plug and play connection to RJ45 patch cords; backwards compatible
<b>Identification</b>	Can be clearly identified with optional labels and icons for port identification
<b>Shuttered version available</b>	Integrated shuttered door keeps out dust and debris of unmated RJ45 jack modules
<b>Keyed version available</b>	Color-specific keys with positive and negative keying features mechanically and visually distinguish connections to prevent unintentional mating with unlike keyed or non-keyed modular plugs, offering network design flexibility, versatility, accommodating discrete networks for enhanced security
<b>Angle termination version available</b>	Side opening allows cable to be terminated to the right or left side of the jack module; ideal for installations that have minimal depth that may not allow standard bend radius practices to be accommodated
<b>Angle termination version available</b>	Side opening allows cable to be terminated to the right side of the jack module; ideal for installations that have minimal depth that may not allow standard bend radius practices to be accommodated
<b>Termination tools (optional)</b>	EGJT termination tool ensures conductors are fully terminated by utilizing a smooth forward motion without impact on critical internal components for maximum reliability; TGJT termination tool ideal for high volume installations
<b>Block out device (optional)</b>	Provides a simple and secure method to control access to data ports while not in use

## applications

Mini-Com® TX6A™ 10Gig™ UTP Jack Modules are a component of the TX6A™ 10Gig™ UTP Copper Cabling System with MaTriX Technology. This end-to-end system provides a cost effective medium for ensuring that network bandwidth needs are easily met today and in the future. The Panduit solution helps ensure organizations efficiently and reliably meet their data transmission needs. With certified performance to the ISO 11801 Class E<sub>A</sub> Edition 2.1, IEEE 802.3an-2006 and

ANSI/TIA-568-C.2 Category 6A standards, this system will support high bandwidth applications with data centers and connections to high end workstations such as stacking switches and switch-to-switch links, storage area networks, aggregation of Gigabit Ethernet channels, real-time intensive financial transactions, streaming video, animation, scientific modeling, and medical imaging.

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## SPECIFICATION SHEET

**TX6A™ 10Gig™ UTP Copper Cabling System with MaTriX Technology**

**Mini-Com® TX6A™ 10Gig™ UTP Jack Modules with Split Foil MaTriX Technology**

**Jack module:** CJ6X88TG\*  
**Shuttered jack module:** CJD6X88TG\*  
**Keyed jack module:** CJK6X88TG\*\*  
**Right angle jack module:** CJR6X88TG\*

**TX6A™ 10Gig™ UTP Copper Cable with MaTriX Technology (100 Meter Solution)**

**Plenum:** PUP6A04\*\*\*-UG  
**Riser:** PUR6A04\*\*\*-UG¹  
**LSZH (60332-1):** PUL6A04\*\*\*-CEG  
**LSZH (60332-3):** PUZ6A04\*\*\*-EG  
**CM:** PUC6A04\*\*\*-EG

**TX6A-SD™ 10Gig™ UTP Copper Cable with MaTriX Technology (70 Meter Solution)**

**Plenum:** PUP6ASD04\*\*\*-UG  
**Riser:** PUR6ASD04\*\*\*-CG  
**LSZH (60332-1):** PUL6ASD04\*\*\*-EG  
**LSZH (60332-3):** PUZ6ASD04\*\*\*-EG  
**CM:** PUC6ASD04\*\*\*-EG

**TX6A™ 10Gig™ UTP Patch Cords with MaTriX Technology (100 Meter Solution)**

**CM (foot lengths):** UTP6A^  
**CM (meter lengths):** UTP6A^MM

**TX6A-SD™ 10Gig™ UTP Patch Cords with MaTriX Technology (70 Meter Solution)**

**CM (foot lengths):** UTP6ASD^BU  
**CM (meter lengths):** UTP6ASD^MBU  
**LSZH (meter lengths):** UTP6ASDL^MM

**Mini-Com® Angled Modular Patch Panels**

**24-port, 1 RU:** CPPA24FMWBLY  
**48-port, 2 RU:** CPPA48FMWBLY  
**72-port, 2 RU:** CPPLA72WBLY

**Mini-Com® Flat Modular Patch Panels**

**24-port, 1 RU:** CPP24FMWBLY  
**48-port, 1 RU:** CPP48HDWBLY  
**48-port, 2 RU:** CPP48FMWBLY  
**72-port, 2 RU:** CPP72FMWBLY

For additional modular patch panels reference [www.panduit.com](http://www.panduit.com)

### Tools and Accessories

**Jack module termination tool:** TGJT or EGJT  
**Wire snipping tool:** CWST  
**Wire stripping tool:** CJAST  
**Clear dust cap:** MDC-C  
**Blockout device:** PSL-DCJB-^^  
**Phone icons:** CIPW-C+  
**Data icons:** CIDIW-C+

\*To designate color, add suffix IW (Off White), EI (Electric Ivory), IG (International Gray), AW (Arctic White), BL (Black), BU (Blue), RD (Red), YL (Yellow), GR (Green), OR (Orange,) or VL (Violet).

\*\*To designate color, add suffix BL (Black), BU (Blue), RD (Red), YL (Yellow), GR (Green), or OR (Orange). Each color representing a different keyed configuration.

¹Substitute PUR6A04\*\*\*-CG for alternative manufacturing location.

^^To designate color, add suffix BU (Blue), WH (White), IG (International Gray), or YL (Yellow).

^For lengths 3 to 20 feet (one foot increments) and 25, 30, 35, 40 feet, change the length designation in the part number to the desired length. For standard cable colors other than Off White, add suffix BL (Black), BU (Blue), RD (Red), YL (Yellow), GR (Green), OR (Orange), GY (Gray), or VL (Violet). For example, the part number for a blue, 15-foot patch cord is UTP6A15BU.

^^For lengths 1, 2, 2.5, 3, 5 meters, change the length designation in the part number to the desired length. For standard cable colors other than Off White, add suffix BL (Black), BU (Blue), RD (Red), YL (Yellow), GR (Green), OR (Orange), GY (Gray), or VL (Violet). LSZH patch cable available in Off White or BU (Blue). For example, the part number for a blue, 5-meter patch cord is UTP5ASD5MBU.

^^^To designate color other than Red, add suffix Black (BL), Blue (BU), Yellow (YL), Green (GR), Orange (OR), Off White (IW), or International Gray (IG) at the end of the part number. 10/package.

^To designate color other than IW (Off White), replace IW with EI (Electric Ivory), IG (International Gray), BL (Black), BU (Blue), RD (Red), YL (Yellow), GR (Green), OR (Orange), or VL (Violet) in the part number. 100/package

Contact customer service for bulk packaging and/or keyed jack modules and patch cords.

[www.panduit.com](http://www.panduit.com)

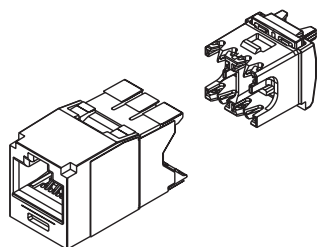
# Mini-Com® TX6A™ 10Gig™ UTP Jack Modules with MaTriX Technology

## test results

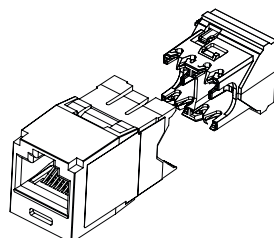
Mechanical Test	Test Method	Measurement	Typical Test Results
Normal Force	—	Load (grams)	> 100
Vibration	IEC 512-6d	Circuit Resistance (mOhms)	< 40
Shock	IEC 512-6c	Contact Disturbance (microsecond)	< 5
Durability	IEC 512-6a	Circuit Resistance (mOhms)	< 20
Mating/Un-mating	IEC 512-6b	Mating Force (N)	< 20
		Un-mating Force (N)	< 20
Termination Cycles	IEC 352	Number of Cycles	>20
Mating Cycles	IEC 60603-7	Number of Plug Insertions	2500

Electrical Test	Test Method	Measurement	Typical Test Results
Low Level Circuit Resistance	IEC 512-2a	Resistance (mOhms)	< 20
Dielectric Withstand Voltage	IEC 512-4a	1000 V, 1 minute	Passed
Insulation Resistance	IEC 512-3a	Resistance (MOhms)	> 500

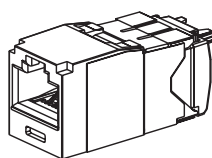
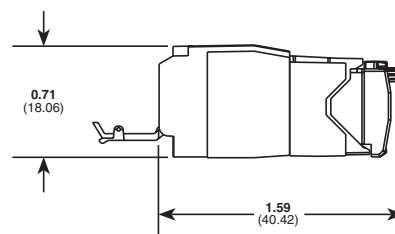
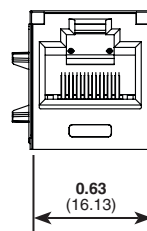
Environmental Test	Test Method	Measurement	Typical Test Results
Temperature Life	IEC 512-9b	Circuit Resistance (mOhms)	< 40
Humidity	IEC 512-11c	Circuit Resistance (mOhms)	< 40
Thermal Shock	IEC 512-11d	Circuit Resistance (mOhms)	< 40
Climatic Sequence	IEC 512-11a	Circuit Resistance (mOhms)	< 40
Flowing Mixed Gas Corrosion	IEC 512-11g	Circuit Resistance (mOhms)	< 40



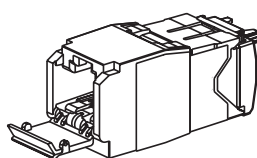
Jack Module and Standard Wire Cap



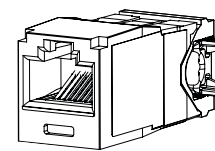
Jack Module and Right Angle Wire Cap



Jack Module



Shuttered Jack Module



Right Angle Jack Module

Dimensions are in inches (Dimensions in parenthesis are metric)

### WORLDWIDE SUBSIDIARIES AND SALES OFFICES

PANDUIT CANADA  
Markham, Ontario  
cs-cdn@panduit.com  
Phone: 800.777.3300

PANDUIT EUROPE LTD.  
London, UK  
cs-emea@panduit.com  
Phone: 44.20.8601.7200

PANDUIT SINGAPORE PTE. LTD.  
Republic of Singapore  
cs-ap@panduit.com  
Phone: 65.6305.7575

PANDUIT JAPAN  
Tokyo, Japan  
cs-japan@panduit.com  
Phone: 81.3.6863.6000

PANDUIT LATIN AMERICA  
Guadalajara, Mexico  
cs-la@panduit.com  
Phone: 52.33.3777.6000

PANDUIT AUSTRALIA PTY. LTD.  
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cs-aus@panduit.com  
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