PANDUIT™

Guaranteed Performance Beyond the Standards
TX6A™ 10Gig™ UTP Advanced MaTriX Copper Cabling Systems

Panduit™ TX6A™ 10Gig™ UTP Copper Cabling Systems with Advanced MaTriX Technology are designed for optimum network performance, design flexibility and reliability to protect network investments well into the future. Each system provides users with headroom assurance that will exceed ANSI/TIA-568-C.2 Category 6A and ISO 11801 Class E_A standards for the following key electrical parameters: Insertion Loss (IL), Near-End Alien Crosstalk (NEXT), Power Sum NEXT, Power Sum ACR-F, Return Loss, Power Sum ACR-N, Power Sum Alien NEXT, and Power Sum AACR-F.

The design of the horizontal and patch cable utilizes Advanced MaTriX Technology and advanced connector compensation techniques to achieve channel bandwidth performance above industry standard requirements. This innovative design reduces the weight and diameter of Category 6A UTP cabling, improving pathway capacity up to 30%, resulting in improved airflow through dense data center enclosures without compromising alien crosstalk performance.
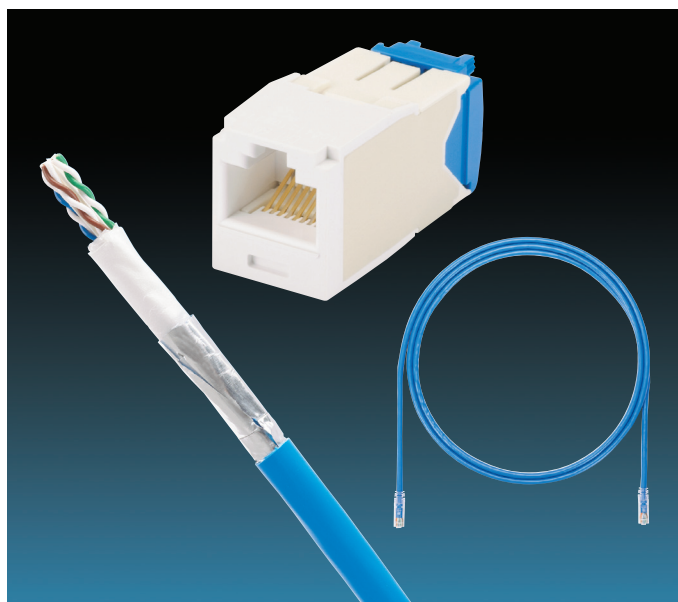
To determine the guaranteed headroom performance, long and short channels of four connector topologies were constructed, tested, and analyzed. To ensure true worst case conditions, channels were tested under the following conditions:

- Six-around-one configuration – bundled horizontal cables and patch cords are tied every 6-8 inches and laid so the disturbed cable is always in the center of the bundle down the full length of the channel
- Four connector topologies – the TX6A™ 10Gig™ UTP Cabling System, per configuration one (up to 100 meters) and three of the ANSI/TIA-568-C.2 Category 6A standard
- Channels were configured with high density patch panels (48-ports, 1 RU) and short 1 meter patch cords, at swept frequencies from 1 MHz to 500 MHz per industry standards
- Under "real world" conditions through the use of industry recognized hand-held testers, no test analyzers or computer models
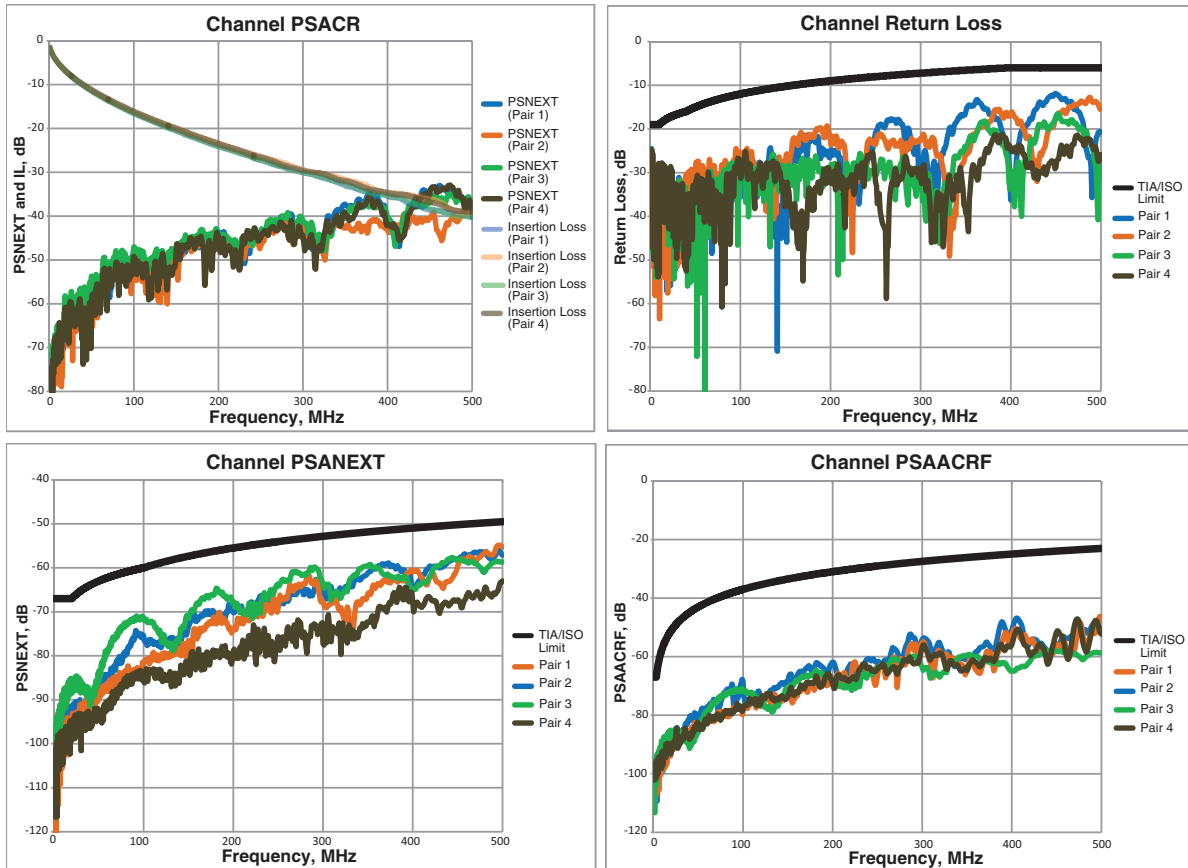
Guaranteed Channel Headroom

Electrical Value	TIA Category 6A	ISO Class E_A
Insertion Loss	3%	3%
NEXT	3.5 dB	2.5 dB
PSNEXT	5 dB	4 dB
PSACR-F	10 dB	10 dB
Return Loss	3 dB	3 dB
PSACR-N	6.5 dB	6.5 dB
PSANEXT	2 dB	2 dB
PSAACR-F	10 dB	10 dB

*Electrical values above are specified standards and consist of worst pair margin per ANSI/TIA-568-C.2 Category 6A and ISO 11801 Class E_A standards.

Category 6A UTP
Guaranteed Headroom Platform
Europe, Middle East, Africa, Asia, Latin America

Electrical Channel Performance Data

Channel PSACR — PSNEXT and IL, dB vs Frequency, MHz
Legend: PSNEXT (Pair 1), PSNEXT (Pair 2), PSNEXT (Pair 3), PSNEXT (Pair 4), Insertion Loss (Pair 1), Insertion Loss (Pair 2), Insertion Loss (Pair 3), Insertion Loss (Pair 4)

Channel Return Loss — Return Loss, dB vs Frequency, MHz
Legend: TIA/ISO Limit, Pair 1, Pair 2, Pair 3, Pair 4

Channel PSANEXT — PSNEXT, dB vs Frequency, MHz
Legend: TIA/ISO Limit, Pair 1, Pair 2, Pair 3, Pair 4

Channel PSAACRF — PSAACRF, dB vs Frequency, MHz
Legend: TIA/ISO Limit, Pair 1, Pair 2, Pair 3, Pair 4

Description	TX6A™ UTP Copper Cabling System (100 meter)	TX6A-SD™ UTP Copper Cabling System (70 meter)
Copper Cable		
LSZH (60332-1)	PUL6AM04*-CEG	PUL6ASD04*-EG
LSZH (60332-3)	PUZ6AM04*-CEG, PUZ6AM04*-CED	PUZ6ASD04*-EG
Riser (CMR)	PUR6AM04*-CG	PUR6ASD04*-CG
Plenun (CMP)	PUP6AM04*-UGA	PUP6ASD04*-UG
PVC (CM)	PUC6AM04*-CEG	PUC6ASD04*-EG
Patch Cords		
CM (24AWG)	UTP6A^^	
CM (26AWG small diameter)	UTP6ASD^^	
LSZH (26AWG small diameter)	UTP6ASDL^^	
Jack Module		
UTP	CJ6X88TG**	
Mini-Com™ Modular Patch Panels		
24-port, Angled, 1 RU	CPPA24FMWBLY	
48-port, Angled, 1 RU	CPPA48FMWBLY	
72-port, Angled, 2 RU	CPPA72FMWBLY	
24-port, Flat, 1 RU	CPP24FMWBLY	
48-port, Flat, 1 RU	CPP48FMWBLY	
72-port, Flat, 2 RU	CPP72FMWBLY	

+Available in standard colors BU (Blue) or WH (White). Contact Customer Service for additional colors.
^^Patch cords are available in a variety of colors and lengths (feet and meters). Visit www.panduit.com or contact customer service for additional information.
**Available in standard colors IW (Off White), EI (Electric Ivory), WH (White), AW (Arctic White), IG (International Gray), BL (Black), BU (Blue), RD (Red), YL (Yellow), GR (Green), OR (Orange) and VL (Violet).

For a copy of the Panduit warranty, visit www.panduit.com/warranty.