

## Guaranteed Performance Beyond the Standards

### TX6A™ 10Gig™ Shielded Copper Cabling System

TX6A™ 10Gig™ Shielded Copper Cabling System is designed for optimum network performance, design flexibility and reliability to protect network investments well into the future. This system provides users with headroom assurance that will exceed ANSI/TIA-568-C.2 Category 6A and ISO 11801 Edition 2.1 Class E<sub>A</sub> standards for the following key electrical parameters: Insertion Loss (IL), Near-End Crosstalk (NEXT), Power Sum NEXT, Power Sum ACR-F, Return Loss, Power Sum ACR-N, Power Sum Alien NEXT, and Power Sum AACR-F. Panduit offers several shielded cable constructions including U/FTP and S/FTP cables with swept frequencies up to 1500MHz.

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:

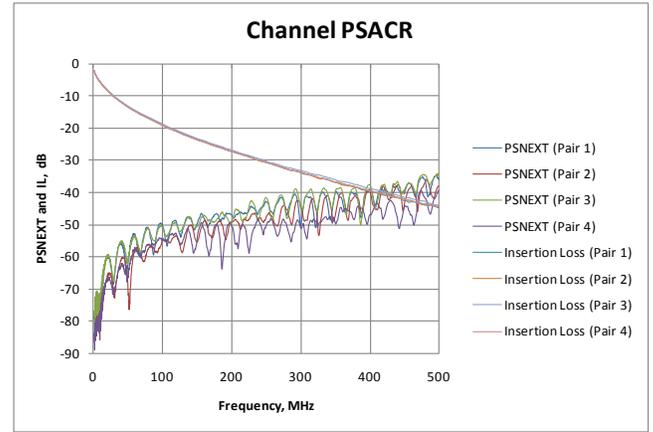
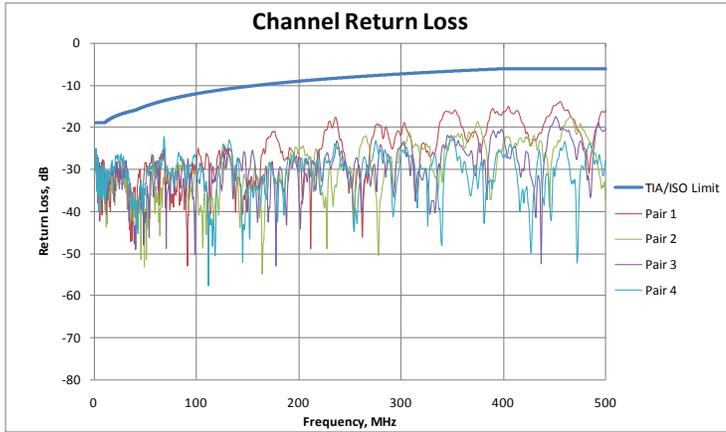
- Six-around-one configuration – bundled horizontal cables and patch cords are tied every 6-8 inches and laid so the disturbed cable is always in the center of the bundle down the full length of the channel
- Four connector topologies – the TX6A™ 10Gig™ Shielded Copper Cabling System was tested under worse case, 100 meter and 24 meter testing configurations per ANSI/TIA-568-C.2, Annex J
- Tested at frequencies from 1 MHz to 500 MHz Category 6A standards, under “real world” conditions through the use of industry recognized hand-held testers, not test analyzers or computer models

Guaranteed Channel Headroom		
Electrical Value	ANSI/TIA Category 6A	ISO Class E <sub>A</sub>
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	20 dB	20 dB
PSAACR-F	20 dB	20 dB

\*Electrical values above are specified standards and consist of worst pair margin per ANSI/TIA-568-C.2 Category 6A and ISO 11801 Edition 2.1 Class EA standards.



# Electrical Channel Performance Data



## Components of the TX6A™ 10Gig™ Shielded Copper Cabling System

Description	Part Number
<b>Category 7A Copper Cable – S/FTP</b>	
LSZH (1500 MHz)	PSL7A04WH-KD
<b>Category 7 Copper Cable – S/FTP</b>	
LSZH (1000 MHz)	PSL7004WH-KD*
LSZH (600 MHz)	PSL7004WH-CED
<b>Category 7 Shipboard/Offshore Copper Cable – S/FTP</b>	
LSZH (SHF1) (600MHz)	PSM7004BU-KEM‡
LSZH (SHF2)	PSMD7004BL-LED^
LSZH (SHF2)	PSMDA7004BL-LED^
<b>Category 6A Copper Cable – U/FTP</b>	
Riser (500 MHz)	PUFR6X04BU-UG*
Plenum (500 MHz)	PUFP6X04BU-UG*
LSZH (500 MHz)	PUFL6X04WH-KD
<b>TX6A™ 10Gig™ Shielded Patch Cords</b>	
Patch Cords (foot lengths)	STP6X3IG**
Patch Cords (meter lengths)	STP6X1MIG***
<b>Mini-Com® TX6A™ 10Gig™ Jack Modules</b>	
Shielded	CJS6X88TGY, CJSM6X88TG
<b>Mini-Com® All Metal Angled Modular Patch Panels</b>	
24-port, Angled, 1 RU	CPA24BLY
48-port, Angled, 2 RU	CPA48BLY
72-port, Angled, 2 RU	CPA72BLY
<b>Mini-Com® All Metal Modular Patch Panels</b>	
24-port, Flat, 1 RU	CP24BLY
48-port, Flat, 2 RU	CP48BLY
72-port, Flat, 2 RU	CP72BLY
<b>Mini-Com® All Metal Modular Patch Panels with Strain Relief Bar</b>	
24-port, Flat, 1 RU	CP24WSBLY
48-port, Flat, 2 RU	CP48WSBLY

\*For standard cable colors other than WH (White), replace WH with DG (Dark Gray), IG (International Gray), or LG (Light Gray).  
 For standard cable colors other than BL (Black), replace BL with WG (Window Gray).  
 ‡For standard cable colors other than BU (Blue), replace BU with IG (International Gray). For length of 500 meters, replace M (1000 meters) at end of part number with D (500 meters).  
 \*For standard cable colors other than BU (Blue), replace BU (Blue) with WH (White), YL (Yellow), or (IG) International Gray.  
 \*\*For lengths 2 to 20 feet (increments of one foot) and 25, 30, 35, 40 feet, change the length designation in the part number to the desired length. For standard cable colors other than IG (International Gray), replace IG suffix with BL (Black), BU (Blue), RD (Red), YL (Yellow), GR (Green), OR (Orange), or VL (Violet) to end of part number. For example, the part number of a blue 15-foot patch cord is STP6X15BU.  
 \*\*\*For lengths 1 to 10 meters (increments of one meter) and 0.5, 1.5, 2.5, 15, 20, 25, 30, 35, 40 meters, change the length designation in the part number to the desired length. For standard cable colors other than IG (International Gray) substitute IG suffix with BL (Black), BU (Blue), GR (Green), RD (Red), YL (Yellow), OR (Orange), or VL (Violet) to the end of the part number. For example, the part number for a blue 15-meter patch cord is STP6X15MBU.  
 Contact customer service for region availability of copper cabling.  
 For a copy of the Panduit warranty, visit [www.panduit.com/warranty](http://www.panduit.com/warranty).