

Cat6A Plenum Unshielded

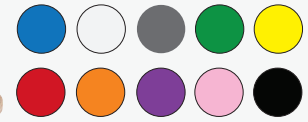
23AWG • 4 Twisted Pairs • CMP
U/UTP • 750MHz • Solid Copper



Lengths Available

- 1000ft

Jacket Colors



Key Features

- Bandwidth tested up to 750 MHz
- Suitable for 1 Gigabit and 10 Gigabit Ethernet up to 328 ft
- In compliance with ANSI/TIA 568.2-D
- RoHS-3 Compliant
- Easily identified color striped pairs
- Supports Power over Ethernet: PoE/PoE+/PoE++ (IEEE 802.3af/at/bt) 4PPoE up to 100W
- Sequential footage markings every 2ft

Technical Data

Insulation	FEP
Average Thickness (mm)	0.25
Min Point Thickness (mm)	0.23
Conductor Insulation Dia. (±0.02mm)	1.08
Twisted Pair Dia. (±0.02mm)	2.16
Ripcord	Kevlar
Spline	Present
Polyethylene Tape	Not Present
Shielding	U/UTP

Conductor	Solid Bare Copper
Size	23AWG
Conductor Dia. (±0.05mm)	0.58

Color of Pairs	
Pair 1	Blue- White/Blue
Pair 2	Orange- White/Orange
Pair 3	Green- White/Green
Pair 4	Brown- White/Brown

Cable Jacket	FR-PVC
Average Thickness (mm)	0.55
Min. Point Thickness (mm)	0.50
Outer Diameter (±0.2mm)	6.20

Standards Reference

UL-444 /
cETLus

ANSI/TIA
568-2.D

ISO/IEC
11801



Print Legend

trueCABLE CAT6A CMP U/UTP 75°C 4PR 23AWG c(ETL)us VERIFIED to ANSI/TIA 568-2.D 750MHz ROHS-3 XXXXFT MM/YY

Last Updated
3/19/2024

*Specs subject to
change without notice.
Current version available
at www.trueCABLE.com



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Electrical Characteristics

PoE Certification	PoE/PoE+/PoE++ 4PPoE
Maximum PoE Wattage	100W
PoE Application Compatibility	802.3af/at/bt Type 4
TIA 568-2.D Cat6A Permanent Link +PoE	CERTIFIED
Maximum Application Speed @ 295ft	10GBASE-T
Nominal Velocity of Propagation (NVP)	70.7
Maximum Operating Voltage	300V
1.0 - 750MHz Impedance (Ω)	100 \pm 15
Maximum Operating Frequency	750MHz
1.0 - 750MHz Delay Skew (ns/100m)	\leq 45
Pair-to-Ground Capacitance Unbalance (pF/km)	\leq 3300
Max. Conductor DC Resistance 20°C (Ω /km)	72.2



Mechanical & Environmental Operating Parameters

Test Object	Jacket	Aging Condition ($^{\circ}\text{C} \times \text{hrs}$)	100 x 168
Test Material	FR-PVC	After Tensile Strength (Mpa)	\geq 85% of unaged
Before- Tensile Strength (Mpa)	\geq 13.8	Aging Condition - Elongation (%)	\geq 50% of unaged
Aging- Elongation (%)	\geq 100	Cold Bend ($-20 \pm 2^{\circ}\text{C} \times 4\text{hrs}$)	No Crack
Min. Bend Radius	2.5cm/1.00in	Operating & Storage Temp.	-40°C to 75°C -40°F to 167°F
Max. Installation Tension	110N/25lb-ft	Installation Temp.	-20°C to 75°C -4°F to 167°F

Tested Compatible Accessories

Product

Part Number

Cat6A Punch Down Keystone Jack Unshielded	6APD90CMPT
Cat6A Toolless Keystone Jack Unshielded	6ATL90CMPT
Cat6/6A Standard RJ45 Connectors Unshielded	LGRJ45
Small Slip-On RJ45 Strain Relief Boot 7.00mm	SMSLIP
Cat6A Field Term Plug Unshielded	6AFT

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Cable ID: 6ACMP UTP PD KSJ > UTP STD LB CAT6/6A RJ45

Test Limit: TIA Cat 6A MPTL (+PoE)

Limits Version: V7.5

Date / Time: 04/08/2021 03:37:42 PM

Operator: DON S

Headroom 5.8 dB (NEXT 3,6-7,8)

Cable Type: Cat 6A U/UTP

NVP: 70.7%

Main: Versiv

S/N: 1924100

Software Version: V6.5 Build 5

Calibration Date: 11/14/2020

Adapter: DSX-8000 (DSX-PLA804)

S/N: 4523169

Test Summary: PASS

Remote: Versiv

S/N: 1917273

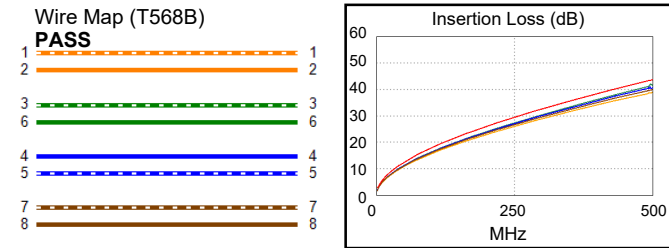
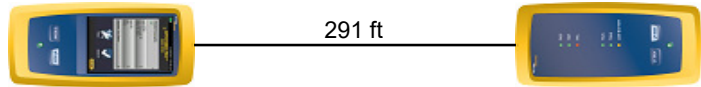
Software Version: V6.5 Build 5

Calibration Date: 11/14/2020

Adapter: DSX-8000R (DSX-PC6A)

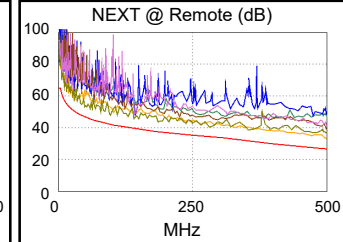
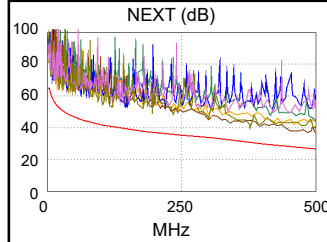
S/N: 4716155

Length (ft), Limit 295	[Pair 1,2]	291
Prop. Delay (ns), Limit 498	[Pair 4,5]	455
Delay Skew (ns), Limit 44	[Pair 4,5]	36
Resistance (ohms)	[Pair 4,5]	12.66
Resist. Unbal. (ohms)	[Pair 3,6]	0.125
Resist. P2P Unbal. (ohms)	[Pair 1,2-4,5]	0.231
Insertion Loss Margin (dB)	[Pair 3,6]	1.4
Frequency (MHz)	[Pair 3,6]	496.0
Limit (dB)	[Pair 3,6]	43.5

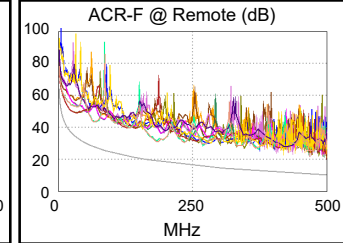
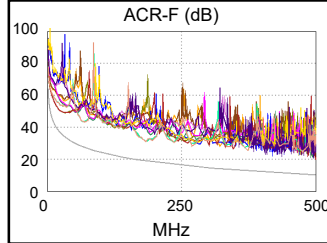


Worst Case Margin Worst Case Value

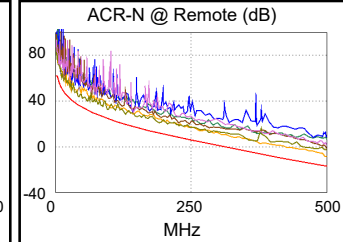
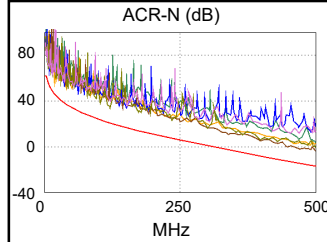
PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-7,8	3,6-7,8	3,6-4,5	1,2-3,6
NEXT (dB)	8.7	5.8	10.3	6.5
Freq. (MHz)	378.0	96.8	500.0	500.0
Limit (dB)	30.7	42.1	26.7	26.7
Worst Pair	3,6	3,6	3,6	3,6
PS NEXT (dB)	9.7	6.0	10.7	7.2
Freq. (MHz)	378.0	266.0	500.0	500.0
Limit (dB)	27.9	32.3	23.8	23.8



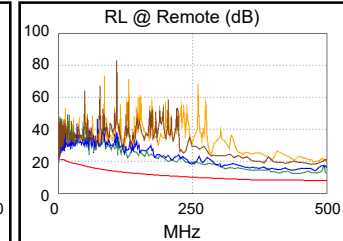
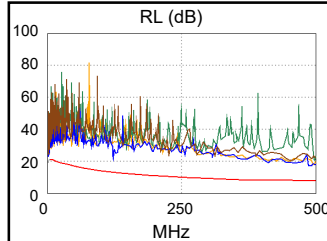
PASS	MAIN	SR	MAIN	SR
Worst Pair	4,5-3,6	3,6-4,5	4,5-3,6	3,6-4,5
ACR-F (dB)	9.5	10.5	9.5	10.5
Freq. (MHz)	500.0	500.0	500.0	500.0
Limit (dB)	10.2	10.2	10.2	10.2
Worst Pair	3,6	4,5	3,6	4,5
PS ACR-F (dB)	11.1	12.4	11.1	12.4
Freq. (MHz)	500.0	499.0	500.0	499.0
Limit (dB)	7.2	7.2	7.2	7.2



N/A	MAIN	SR	MAIN	SR
Worst Pair	1,2-3,6	3,6-7,8	3,6-4,5	1,2-3,6
ACR-N (dB)	10.8	7.4	13.6	8.4
Freq. (MHz)	18.1	50.0	500.0	498.0
Limit (dB)	46.3	34.2	-17.1	-16.9
Worst Pair	3,6	3,6	3,6	3,6
PS ACR-N (dB)	11.9	8.2	13.0	9.1
Freq. (MHz)	396.0	266.0	500.0	498.0
Limit (dB)	-11.0	1.7	-20.0	-19.8



PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2	3,6	4,5	3,6
RL (dB)	7.3	4.2	9.1	4.2
Freq. (MHz)	4.1	455.0	487.0	455.0
Limit (dB)	21.0	8.0	8.0	8.0



Compliant Network Standards:
 10BASE-T 100BASE-TX 100BASE-T4
 1000BASE-T 2.5GBASE-T 5GBASE-T
 10GBASE-T ATM-25 ATM-51
 ATM-155 100VG-AnyLan TR-4
 TR-16 Active TR-16 Passive