Cat6A Direct Burial Shielded

23AWG • 4 Twisted Pairs • CMX
F/UTP • 750MHz • Solid Copper

Lengths Available

- 500ft
- 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
- CMX jacket can withstand sunlight, dirt, snow, and moisture
- Supports Power over Ethernet: PoE/PoE+/ PoE++ (IEEE 802.3af/at/bt) 4PPoE up to 90W
- cETLus Certified, RoHS-3 Compliant

Technical Data

Insulation	PE
Average Thickness (mm)	0.278
Min Point Thickness (mm)	0.255
Conductor Insulation Dia. (±0.02mm)	**1.14**
Twisted Pair Dia. (±0.02mm)	2.28
Ripcord	Nylon
Spline	PE
Polyethylene Tape	Present
Shielding	F/UTP
Drain Wire- Solid Tinned Copper (mm)	0.40
Water Resistance	Jacket & Dry Tape

Conductor	Solid Bare Copper
Size	23AWG
Conductor Dia. (±0.05mm)	0.585

Standards Reference

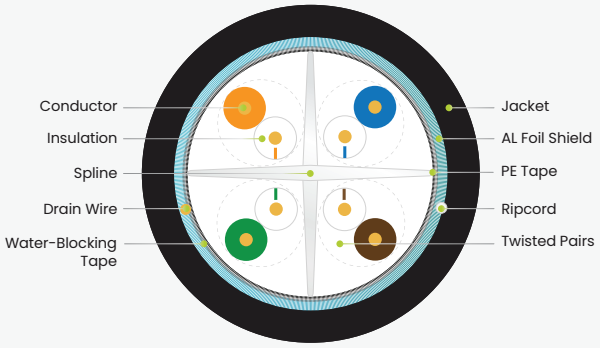
UL-444 / cETLus

ANSI/TIA 568-2.D

ISO/IEC 11801

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	LLDPE
Average Thickness (mm)	0.60
Min. Point Thickness (mm)	0.55
Outer Diameter (±0.2mm)	**7.60**



Print Legend

CAT6A CMX F/UTP DIRECT BURIAL UV 75°C 4PR 23AWG

Revision 2

RoHS certified PURE COPPER Intertek LISTED

Cat6A Direct Burial Shielded

23AWG • 4 Twisted Pairs • CMX
F/UTP • 750MHz • Solid Copper

Lengths Available

- 500ft
- 1000ft

Jacket Colors

Electrical Characteristics

PoE Certification	PoE/PoE+/PoE++ 4PPoE
Maximum PoE Wattage	90W
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)	67.0
Maximum Operating Voltage	300V
1.0 - 750MHz Impedance (Ω)	100 ± 15
Maximum Operating Frequency	750MHz
1.0 - 750MHz Delay Skew (ns/100m)	≤45
Pair-to-Ground Capacitance Unbalance (pF/km)	≤3300
Max. Conductor DC Resistance 20°C (Ω/km)	68

Mechanical & Environmental Operating Parameters

Test Object	Jacket
Test Material	LLDPE
Before- Tensile Strength (Mpa)	≥13.8
Aging- Elongation (%)	≥100
Min. Bend Radius	5.5cm/2.00in
Max. Installation Tension	110N/25lb-ft

Aging Condition (°C x hrs)	100 x 168
After Tensile Strength (Mpa)	≥85% of unaged
Aging Condition - Elongation (%)	≥50% of unaged
Cold Bend(-20 ± 2°C x 4hrs)	No Crack
Operating & Storage Temp.	-40°C to 75°C | -40°F to 167°F
Installation Temp.	-20°C to 75°C | -4°F to 167°F

Tested Compatible Accessories

Product	Part Number
Cat6A Toolless Keystone Jack | Shielded	6ASTL90CMPT
Cat6/6A Pass Through RJ45 Connectors | Shielded	LGEGPTRJ45
Cat6A Field Term Plug | Shielded	6ASFT
Conductive Copper Fabric Strips	CUStrips_100pc
Large Slip-On RJ45 Strain Relief Boot | 8.00mm	LGSLIP

Revision 2

RoHS certified PURE COPPER Intertek LISTED

LINKWARE™ PC
CABLE TEST MANAGEMENT SOFTWARE

Cable ID: 6ASCMXBLK TLESS STP KSJ > TLESS STP KSJ

Test Summary: PASS

Test Limit: TIA Cat 6A Perm. Link (+PoE)
Limits Version: V7.5
Date / Time: 08/16/2021 11:24:26 AM
Operator: DON S
Headroom 4.1 dB (NEXT 1,2-7,8)
Cable Type: Cat 6A F/UTP
NVP: 67.0%

Main: Versiv
S/N: 1924100
Software Version: V6.5 Build 5
Calibration Date: 11/14/2020
Adapter: DSX-8000 (DSX-PLA804)
S/N: 4523168

Remote: Versiv
S/N: 1917273
Software Version: V6.5 Build 5
Calibration Date: 11/14/2020
Adapter: DSX-8000R (DSX-PLA804)
S/N: 4523169

Length (ft), Limit 295	[Pair 4,5]	296
Prop. Delay (ns), Limit 498	[Pair 1,2]	485
Delay Skew (ns), Limit 44	[Pair 1,2]	36
Resistance (ohms), Limit 21.00	[Pair 7,8]	13.24
Resist. Unbal. (ohms), Limit 0.400	[Pair 7,8]	0.070
Resist. P2P Unbal. (ohms), Limit 0.450	[Pair 4,5-7,8]	0.189
Insertion Loss Margin (dB)	[Pair 1,2]	3.7
Frequency (MHz)	[Pair 1,2]	500.0
Limit (dB)	[Pair 1,2]	43.8

	Worst Case Margin		Worst Case Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2-7,8	3,6-7,8	1,2-7,8	3,6-7,8
NEXT (dB)	4.1	7.7	4.1	7.7
Freq. (MHz)	455.0	498.0	455.0	498.0
Limit (dB)	28.0	26.7	28.0	26.7
Worst Pair	1,2	3,6	1,2	3,6
PS NEXT (dB)	6.3	8.3	6.4	8.3
Freq. (MHz)	455.0	499.0	456.0	499.0
Limit (dB)	25.2	23.8	25.1	23.8

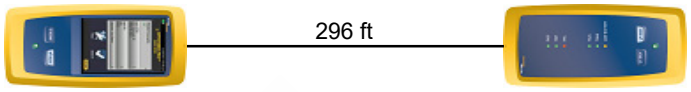
PASS	MAIN	SR	MAIN	SR
Worst Pair	4,5-1,2	4,5-1,2	4,5-1,2	4,5-1,2
ACR-F (dB)	14.0	14.0	14.0	14.0
Freq. (MHz)	497.0	497.0	497.0	497.0
Limit (dB)	10.3	10.3	10.3	10.3
Worst Pair	1,2	1,2	1,2	1,2
PS ACR-F (dB)	16.2	16.4	16.8	16.6
Freq. (MHz)	408.0	408.0	498.0	497.0
Limit (dB)	9.0	9.0	7.2	7.3

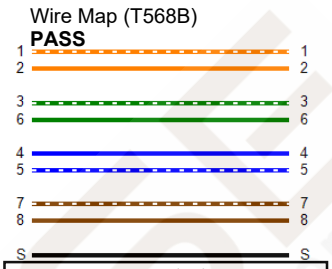
N/A	MAIN	SR	MAIN	SR
Worst Pair	1,2-7,8	1,2-7,8	1,2-7,8	3,6-7,8
ACR-N (dB)	8.1	9.1	8.2	11.9
Freq. (MHz)	455.0	30.9	456.0	498.0
Limit (dB)	-13.4	40.3	-13.5	-16.9
Worst Pair	1,2	1,2	1,2	3,6
PS ACR-N (dB)	9.7	10.2	9.7	12.7
Freq. (MHz)	456.0	30.9	456.0	499.0
Limit (dB)	-16.3	37.9	-16.3	-19.9

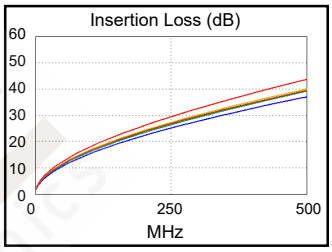
PASS	MAIN	SR	MAIN	SR
Worst Pair	4,5	4,5	4,5	4,5
RL (dB)	7.2	5.2	9.4	8.4
Freq. (MHz)	4.8	4.8	422.0	492.0
Limit (dB)	21.0	21.0	8.0	8.0

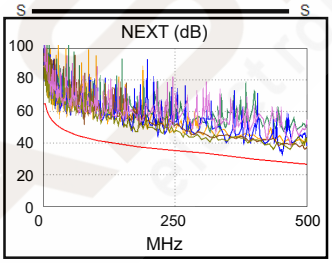
Compliant Network Standards:

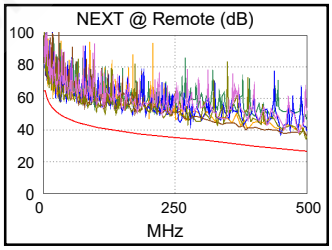
10BASE-T	100BASE-TX	100BASE-T4
1000BASE-T	2.5GBASE-T	5GBASE-T
10GBASE-T	ATM-25	ATM-51
ATM-155	100VG-AnyLan	TR-4
TR-16 Active	TR-16 Passive	

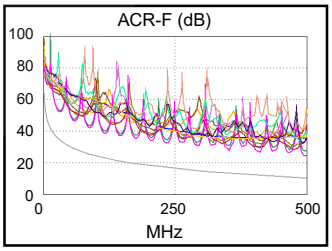


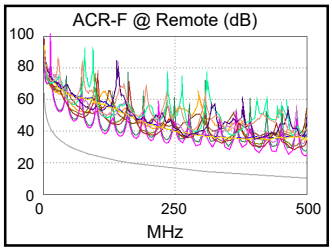


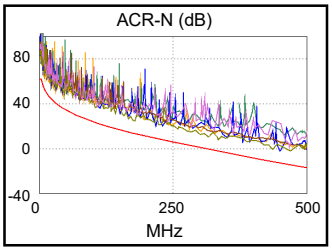


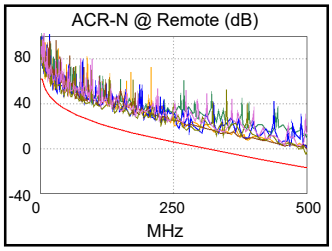


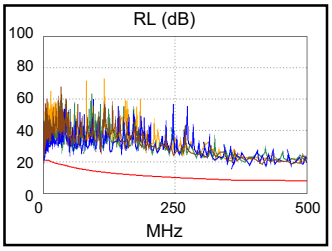


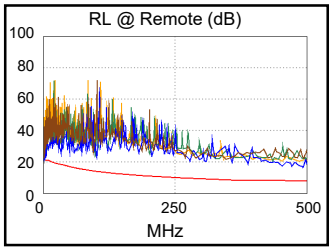












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