

Cat5e Direct Burial Shielded

24AWG • 4 Twisted Pairs • CMX
F/UTP • 350MHz • Solid Copper

Lengths Available

- 500ft
- 1000ft

Jacket Colors



Key Features

- Bandwidth tested up to 350 MHz
- Suitable for 1 Gigabit and 2.5 Gigabit Ethernet up to 328 ft
- In compliance with ANSI/TIA 568.2-D
- CMX jacket designed to withstand sunlight, dirt, snow, and moisture
- Supports Power over Ethernet: PoE/PoE+/PoE++ (IEEE 802.3af/at/bt) 4PPoE up to 90W
- Sequential footage markings every 2ft

Technical Data

Insulation	PE
Average Thickness (mm)	0.228
Min Point Thickness (mm)	0.205
Conductor Insulation Dia. (±0.02mm)	0.97
Twisted Pair Dia. (±0.02mm)	1.94
Ripcord	Nylon
Spline	Not Present
Polyethylene Tape	Present
Shielding	F/UTP
Drain Wire - Solid Tinned Copper (mm)	0.40
Water Resistance	Jacket & Dry Tape

Conductor	Solid Bare Copper
Size	24AWG
Conductor Dia. (±0.05mm)	0.515

Standards Reference

UL-444 /
cETLus

ANSI/TIA
568-2.D

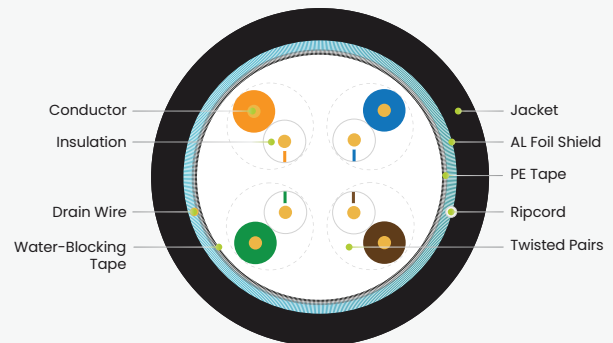
ISO/IEC
11801

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

Cable Jacket	LLDPE
Average Thickness (mm)	0.60
Min. Point Thickness (mm)	0.54
Outer Diameter (±0.2mm)	6.80



Print Legend

CAT5e CMX F/UTP DIRECT BURIAL UV 75°C 4PR 24AWG

Cat5e Direct Burial Shielded

24AWG • 4 Twisted Pairs • CMX
F/UTP • 350MHz • 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 Cat5e Permanent Link +PoE	CERTIFIED
Maximum Application Speed @ 295ft	2.5GBASE-T
Nominal Velocity of Propagation (NVP)	69
Maximum Operating Voltage	300V
1.0 - 350MHz Impedance (Ω)	100 \pm 15
Maximum Operating Frequency	350MHz
1.0 - 350MHz Delay Skew (ns/100m)	\leq 45
Pair-to-Ground Capacitance Unbalance (pF/km)	\leq 3300
Max. Conductor DC Resistance 20°C (Ω /km)	86



Mechanical & Environmental Operating Parameters

Test Object	Jacket	Aging Condition ($^{\circ}\text{C} \times \text{hrs}$)	100 x 168
Test Material	LLDPE	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	3.5cm/1.50in	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

Cat5e Toolless Keystone Jack Shielded	5ESTL90CMPT
Cat5e Pass Through RJ45 Connectors Shielded	SMIGPTRJ45
Cat6A Field Term Plug Shielded	6ASFT
Conductive Copper Fabric Strips	CUstrips_100pc
Large Cut-to-Fit RJ45 Strain Relief Boot 5.5 - 7mm	LGCTF



Cable ID: 5ESCMX 11/21 STP JACK > JACK

Test Limit: TIA Cat 5e Perm. Link (+PoE)

Limits Version: V7.6

Date / Time: 04/11/2022 10:17:17 AM

Operator: DON S

Headroom 11.0 dB (NEXT 3,6-7,8)

Cable Type: Cat 5e F/UTP

NVP: 69.1%

Main: Versiv

S/N: 1924100

Software Version: V6.7 Build 1

Calibration Date: 11/14/2020

Adapter: DSX-8000 (DSX-PLA804)

S/N: 4523169

Test Summary: PASS

Remote: Versiv

S/N: 1917273

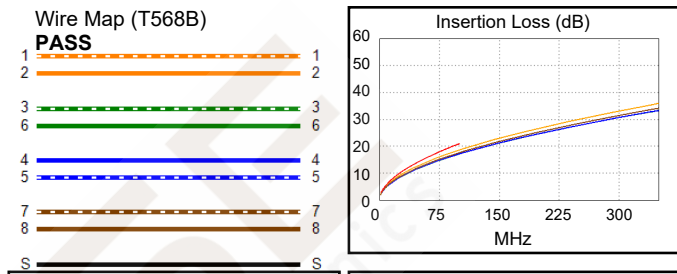
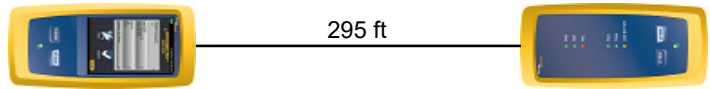
Software Version: V6.7 Build 1

Calibration Date: 11/14/2020

Adapter: DSX-8000R (DSX-PLA804)

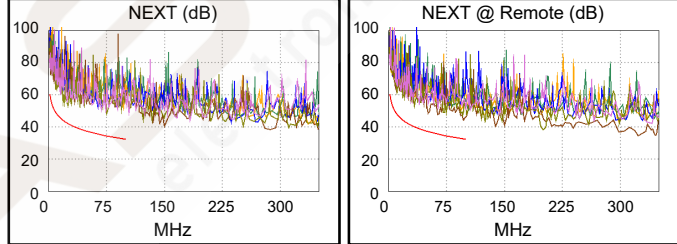
S/N: 4523168

Length (ft), Limit 295	[Pair 4,5]	295
Prop. Delay (ns), Limit 498	[Pair 1,2]	464
Delay Skew (ns), Limit 44	[Pair 1,2]	30
Resistance (ohms), Limit 21.00	[Pair 1,2]	16.22
Resist. Unbal. (ohms), Limit 0.430	[Pair 4,5]	0.212
Resist. P2P Unbal. (ohms), Limit 0.530	[Pair 1,2-4,5]	0.507
Insertion Loss Margin (dB)	[Pair 1,2]	2.4
Frequency (MHz)	[Pair 1,2]	100.0
Limit (dB)	[Pair 1,2]	21.0

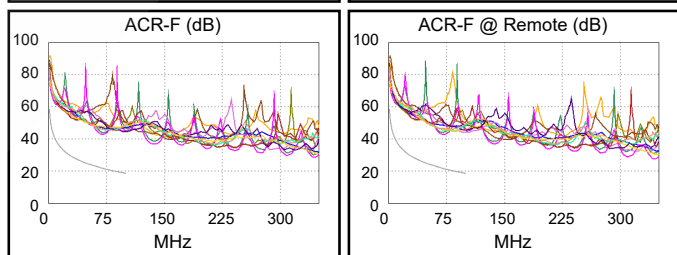


Worst Case Margin Worst Case Value

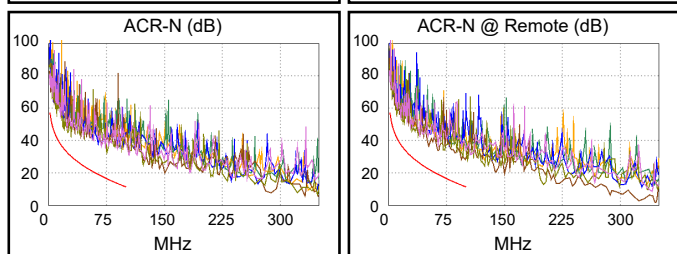
PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-7,8	3,6-4,5	3,6-7,8	3,6-4,5
NEXT (dB)	11.0	11.4	13.4	11.8
Freq. (MHz)	25.1	51.8	75.5	97.0
Limit (dB)	42.1	37.0	34.3	32.5
Worst Pair	7,8	3,6	3,6	3,6
PS NEXT (dB)	12.2	12.9	15.7	12.9
Freq. (MHz)	24.5	96.8	75.5	96.8
Limit (dB)	39.3	29.5	31.3	29.5



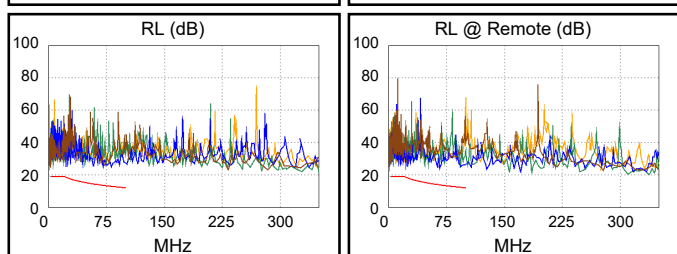
PASS	MAIN	SR	MAIN	SR
Worst Pair	4,5-1,2	4,5-1,2	4,5-1,2	4,5-1,2
ACR-F (dB)	21.0	21.0	21.2	21.1
Freq. (MHz)	67.3	69.5	70.8	71.0
Limit (dB)	22.1	21.8	21.6	21.6
Worst Pair	1,2	1,2	4,5	1,2
PS ACR-F (dB)	20.7	20.7	22.7	22.5
Freq. (MHz)	1.4	2.5	73.8	72.5
Limit (dB)	52.8	47.7	18.3	18.4



N/A	MAIN	SR	MAIN	SR
Worst Pair	3,6-7,8	3,6-4,5	3,6-7,8	3,6-4,5
ACR-N (dB)	12.4	13.9	16.2	15.5
Freq. (MHz)	25.3	51.8	75.5	97.0
Limit (dB)	32.0	22.3	16.3	11.9
Worst Pair	7,8	3,6	1,2	3,6
PS ACR-N (dB)	13.6	14.8	22.7	16.7
Freq. (MHz)	24.5	10.8	97.3	96.8
Limit (dB)	29.4	38.6	8.8	8.9



PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6	3,6	4,5	4,5
RL (dB)	7.9	7.8	11.9	10.2
Freq. (MHz)	5.9	6.0	82.0	66.0
Limit (dB)	19.0	19.0	12.9	13.8



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