

# Cat5e Outdoor Unshielded

24AWG • 4 Twisted Pairs • CMX  
U/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 can 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)                     | 0.205       |
| Min Point Thickness (mm)                   | 0.198       |
| <b>Conductor Insulation Dia. (±0.02mm)</b> | <b>0.91</b> |
| Twisted Pair Dia. (±0.02mm)                | 1.82        |
| Ripcord                                    | Nylon       |
| Spline                                     | Not Present |
| Polyethylene Tape                          | Present     |
| Shielding                                  | U/UTP       |
| Water Resistance                           | Jacket Only |

| Conductor                | Solid Bare Copper |
|--------------------------|-------------------|
| Size                     | 24AWG             |
| Conductor Dia. (±0.05mm) | 0.50              |

### Standards Reference

UL-444 / cETLus

ANSI/TIA 568-2.D

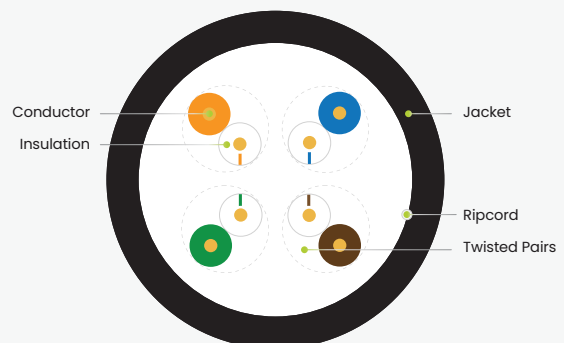
ISO/IEC 11801

### 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)         | 0.50        |
| Min. Point Thickness (mm)      | 0.45        |
| <b>Outer Diameter (±0.2mm)</b> | <b>5.10</b> |



## Print Legend

trueCABLE 4007468 Cat5e CMX U/UTP OUTDOOR UV 75°C 4PR 24AWG c(ETL)us VERIFIED to ANSI/TIA 568-2.D 350MHz ROHS-3 XXXXFT MM/YY

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## 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)             | 69.0                 |
| Maximum Operating Voltage                         | 300V                 |
| 1.0 - 350MHz Impedance ( $\Omega$ )               | 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 ( $\Omega$ /km) | 93.8                 |



## 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               | 2.5cm/1.00in | Operating & Storage Temp.                                    | $-40^{\circ}\text{C}$ to $75^{\circ}\text{C}$   $-40^{\circ}\text{F}$ to $167^{\circ}\text{F}$ |
| Max. Installation Tension      | 110N/25lb-ft | Installation Temp.   | $-20^{\circ}\text{C}$ to $75^{\circ}\text{C}$   $-4^{\circ}\text{F}$ to $167^{\circ}\text{F}$  |

## Tested Compatible Accessories

### Product

### Part Number

|   |            |
|---|------------|
| Cat5e Punch Down Keystone Jack   Unshielded             | 5EPD90CMPT |
| Cat5e Toolless Keystone Jack   Unshielded               | 5ETL90CMPT |
| Cat5e Pass Through RJ45 Connectors   Unshielded         | 5MPTRJ45   |
| Cat5e Standard RJ45 Connectors   Unshielded             | 5MRJ45     |
| Small Cut-to-Fit RJ45 Strain Relief Boot   5.5 - 7.00mm | 5SMCTF     |



**Cable ID: 5ECMXUVBLK 10/21 JACKET DATE**

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

Limits Version: V7.6  
Date / Time: 11/29/2021 05:34:33 PM  
Operator: DON S

Headroom 10.0 dB (NEXT 1,2-3,6)

Cable Type: Cat 5e U/UTP

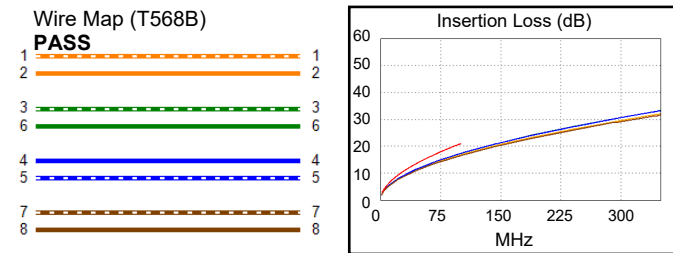
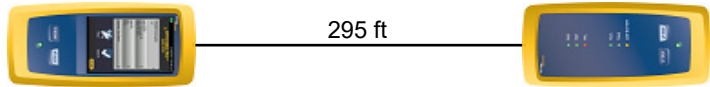
NVP: 69.0%

Main: Versiv  
S/N: 1924100  
Software Version: V6.6 Build 2  
Calibration Date: 11/14/2020  
Adapter: DSX-8000 (DSX-PLA804)  
S/N: 4523168

**Test Summary: PASS**

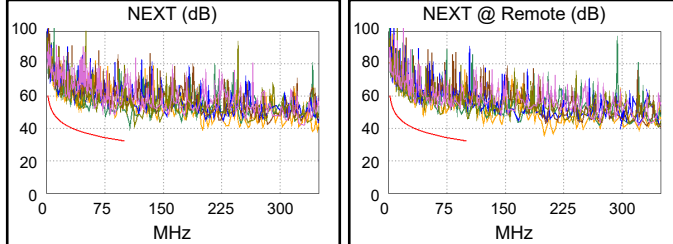
Remote: Versiv  
S/N: 1917273  
Software Version: V6.6 Build 2  
Calibration Date: 11/14/2020  
Adapter: DSX-8000R (DSX-PLA804)  
S/N: 4523169

|  |                |       |
|--|----------------|-------|
| Length (ft), Limit 295                 | [Pair 7,8]     | 295   |
| Prop. Delay (ns), Limit 498            | [Pair 4,5]     | 449   |
| Delay Skew (ns), Limit 44              | [Pair 4,5]     | 14    |
| Resistance (ohms), Limit 21.00         | [Pair 4,5]     | 16.77 |
| Resist. Unbal. (ohms), Limit 0.500     | [Pair 3,6]     | 0.070 |
| Resist. P2P Unbal. (ohms), Limit 0.580 | [Pair 1,2-4,5] | 0.088 |
|  |                |       |
| Insertion Loss Margin (dB)             | [Pair 3,6]     | 3.7   |
| Frequency (MHz)                        | [Pair 3,6]     | 100.0 |
| Limit (dB)                             | [Pair 3,6]     | 21.0  |

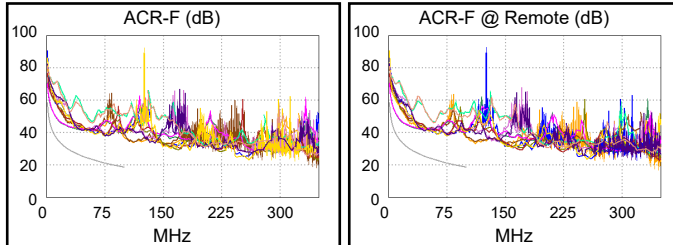


Worst Case Margin Worst Case Value

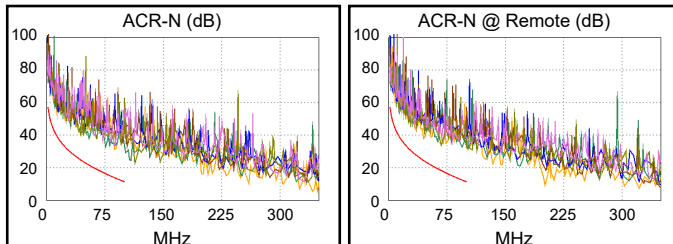
| PASS                | MAIN    | SR      | MAIN    | SR      |
|---------------------|---------|---------|---------|---------|
| Worst Pair          | 1,2-3,6 | 1,2-3,6 | 1,2-3,6 | 3,6-7,8 |
| <b>NEXT (dB)</b>    | 12.3    | 10.0    | 13.6    | 11.8    |
| Freq. (MHz)         | 13.0    | 44.5    | 88.3    | 67.5    |
| Limit (dB)          | 46.7    | 38.1    | 33.2    | 35.1    |
| Worst Pair          | 3,6     | 3,6     | 1,2     | 7,8     |
| <b>PS NEXT (dB)</b> | 13.9    | 12.5    | 14.8    | 14.0    |
| Freq. (MHz)         | 41.8    | 44.5    | 87.8    | 67.3    |
| Limit (dB)          | 35.5    | 35.1    | 30.2    | 32.1    |



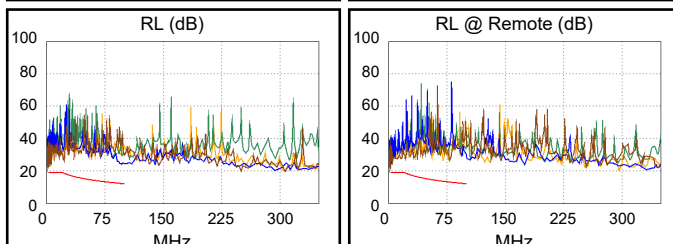
| PASS                 | MAIN    | SR      | MAIN    | SR      |
|----------------------|---------|---------|---------|---------|
| Worst Pair           | 1,2-4,5 | 4,5-1,2 | 1,2-3,6 | 1,2-3,6 |
| <b>ACR-F (dB)</b>    | 11.8    | 11.9    | 18.1    | 17.9    |
| Freq. (MHz)          | 2.3     | 2.3     | 100.0   | 99.5    |
| Limit (dB)           | 51.6    | 51.6    | 18.6    | 18.7    |
| Worst Pair           | 4,5     | 4,5     | 1,2     | 3,6     |
| <b>PS ACR-F (dB)</b> | 13.5    | 13.5    | 18.3    | 18.6    |
| Freq. (MHz)          | 1.9     | 1.0     | 99.3    | 99.5    |
| Limit (dB)           | 50.2    | 55.6    | 15.7    | 15.7    |



| N/A                  | MAIN    | SR      | MAIN    | SR      |
|----------------------|---------|---------|---------|---------|
| Worst Pair           | 1,2-3,6 | 1,2-3,6 | 1,2-3,6 | 1,2-4,5 |
| <b>ACR-N (dB)</b>    | 13.2    | 12.2    | 17.0    | 19.5    |
| Freq. (MHz)          | 13.0    | 44.5    | 88.3    | 94.0    |
| Limit (dB)           | 39.6    | 24.5    | 13.6    | 12.5    |
| Worst Pair           | 1,2     | 3,6     | 1,2     | 4,5     |
| <b>PS ACR-N (dB)</b> | 15.3    | 14.7    | 18.6    | 22.1    |
| Freq. (MHz)          | 13.1    | 44.5    | 87.8    | 94.0    |
| Limit (dB)           | 36.5    | 21.5    | 10.7    | 9.5     |



| PASS           | MAIN | SR   | MAIN | SR   |
|----------------|------|------|------|------|
| Worst Pair     | 7,8  | 7,8  | 4,5  | 7,8  |
| <b>RL (dB)</b> | 6.5  | 6.2  | 11.7 | 6.2  |
| Freq. (MHz)    | 3.8  | 3.8  | 96.8 | 3.8  |
| Limit (dB)     | 19.0 | 19.0 | 12.2 | 19.0 |



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