



Product: [1212](#) 

Category 5E+ Cable, 4 Pair, U/UTP, CMR

Product Description

Category 5E+ Premise Horizontal Cable (350MHz), 4 Pair, 24 AWG Solid Bare Copper Conductors, U/UTP, Riser-CMR, PVC Jacket

Technical Specifications

Product Overview

| | |
|------------------------|--|
| Suitable Applications: | Premise Horizontal Cable, Ethernet 1000BASE-T, Ethernet 100BASE-TX, Ethernet 10BASE-T, PoE++, PoE+, PoE |
| Patent: | This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/resources/patents . |

Construction Details

Conductor

| AWG | Stranding | Material | Number of Pairs |
|-----|-----------|------------------|-----------------|
| 24 | Solid | BC - Bare Copper | 4 |

Insulation

| Material | Color Code |
|------------|--|
| Polyolefin | White/Blue Stripe & Blue, White/Orange Stripe & Orange, White/Green Stripe & Green, White/Brown Stripe & Brown |

Bonded-Pair: No

Outer Jacket Material

| Material | Nom. Diameter | Ripcord |
|--------------------------|---------------|---------|
| PVC - Polyvinyl Chloride | 0.206 in | Yes |

Electrical Characteristics

Electricals

| Max. Conductor DCR | Max. DCR Unbalance | Max. Capacitance Unbalance | Nom. Mutual Capacitance | Nom. Velocity of Prop. |
|--------------------|--------------------|----------------------------|-------------------------|------------------------|
| 89 Ohm/km | 3% | 330 pF/100m | 15 pF/ft | 70% |

Delay

| Frequency [MHz] | Max. Delay | Max. Delay Skew | Nom. Velocity of Propagation (VP) [%] |
|-----------------|---------------|-----------------|---------------------------------------|
| 100 MHz | 537.6 ns/100m | 25 ns/100m | 70% |

High Freq

| Frequency [MHz] | Max. Insertion Loss (Attenuation) | Min. NEXT [dB] | Min. PSNEXT [dB] | Min. ACR [dB] | Min. PSACR [dB] | Min. ACRF (ELFEXT) [dB] | Min. PSACRF (PSELFEXT) [dB] | Min. RL (Return Loss) [dB] | Max./Min. Input Impedance (unFitted) | Max./Min. Fitted Impedance |
|-----------------|-----------------------------------|----------------|------------------|---------------|-----------------|-------------------------|-----------------------------|----------------------------|--------------------------------------|----------------------------|
| 1 MHz | 2.0 dB/100m | 70.3 dB | 69.3 dB | 68.3 dB | 67.3 dB | 67.8 dB | 65.8 dB | 20.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 4 MHz | 4.0 dB/100m | 61.3 dB | 60.3 dB | 57.3 dB | 56.3 dB | 55.8 dB | 53.8 dB | 23.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 8 MHz | 5.7 dB/100m | 56.8 dB | 55.8 dB | 51.1 dB | 50.1 dB | 49.7 dB | 47.7 dB | 24.5 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 10 MHz | 6.4 dB/100m | 55.3 dB | 54.3 dB | 48.9 dB | 47.9 dB | 47.8 dB | 45.8 dB | 25.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 16 MHz | 8.1 dB/100m | 52.2 dB | 51.2 dB | 44.1 dB | 43.1 dB | 43.7 dB | 41.7 dB | 25.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 20 MHz | 9.1 dB/100m | 50.8 dB | 49.8 dB | 41.7 dB | 40.7 dB | 41.8 dB | 39.8 dB | 25.0 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 25 MHz | 10.2 dB/100m | 49.3 dB | 48.3 dB | 39.1 dB | 38.1 dB | 39.8 dB | 37.8 dB | 24.3 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 31.25 MHz | 11.4 dB/100m | 47.9 dB | 46.9 dB | 36.4 dB | 35.4 dB | 37.9 dB | 35.9 dB | 23.6 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 62.5 MHz | 16.4 dB/100m | 43.4 dB | 42.4 dB | 27.0 dB | 26.0 dB | 31.9 dB | 29.9 dB | 21.5 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |

| | | | | | | | | | | |
|---------|--------------|---------|---------|---------|---------|---------|---------|---------|--------------|--------------|
| 100 MHz | 21.0 dB/100m | 40.3 dB | 39.3 dB | 19.3 dB | 18.3 dB | 27.8 dB | 25.8 dB | 20.1 dB | 100 ± 15 Ohm | 100 ± 15 Ohm |
| 155 MHz | 26.6 dB/100m | 37.4 dB | 36.4 dB | 10.9 dB | 9.9 dB | 24.0 dB | 22.0 dB | 18.8 dB | 100 ± 22 Ohm | 100 ± 15 Ohm |
| 200 MHz | 30.5 dB/100m | 35.8 dB | 34.8 dB | 5.3 dB | 4.3 dB | 21.8 dB | 19.8 dB | 18.0 dB | 100 ± 22 Ohm | 100 ± 15 Ohm |
| 250 MHz | 34.4 dB/100m | 34.3 dB | 33.3 dB | -0.1 dB | -1.1 dB | 19.8 dB | 17.8 dB | 17.3 dB | 100 ± 32 Ohm | 100 ± 15 Ohm |
| 300 MHz | 38.0 dB/100m | 33.1 dB | 32.1 dB | | | 18.3 dB | 16.3 dB | 14.4 dB | 100 ± 32 Ohm | 100 ± 15 Ohm |
| 350 MHz | 41.4 dB/100m | 32.1 dB | 31.1 dB | | | 16.9 dB | 14.9 dB | 13.8 dB | 100 ± 32 Ohm | 100 ± 15 Ohm |
| 400 MHz | 44.6 dB/100m | 31.3 dB | 30.3 dB | | | 15.8 dB | 13.8 dB | 13.3 dB | 100 ± 32 Ohm | 100 ± 15 Ohm |
| 450 MHz | 47.7 dB/100m | 30.5 dB | 29.5 dB | | | 14.7 dB | 12.7 dB | 12.8 dB | 100 ± 32 Ohm | 100 ± 15 Ohm |

Voltage

| |
|--------------------------|
| UL Voltage Rating |
| 300 V (CMR) |

Mechanical Characteristics

Temperature

| UL Rating | Operating | Installation | Storage |
|-----------|----------------|--------------|----------------|
| 75°C | -20°C To +75°C | 0°C To +50°C | -20°C To +75°C |

Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 1.0 in | 2.25 in |

| | |
|--------------------|---------------|
| Max. Pull Tension: | 25 lbs |
| Bulk Cable Weight: | 20 lbs/1000ft |

Standards and Compliance

| | |
|---------------------------------|--|
| Environmental Suitability: | Riser, Indoor |
| Sustainability: | Product Lens™, Environmental Product Declaration (EPD) Available |
| Flammability / Fire Resistance: | UL 1666 Riser, FT4, FT4, IEC 60332-1-2 |
| NEC / UL Compliance: | 800, CMR |
| CEC / C(UL) Compliance: | CMR |
| ICEA Compliance: | S-90-661-2012 |
| IEEE Compliance: | IEEE 802.3bt Type 1, Type 2, Type 3 |
| NEMA Compliance: | NEMA WC-63.1 |
| Data Category: | Category 5e |
| TIA/EIA Compliance: | ANSI/TIA-568.2-D Category 5e |
| CPR Euroclass: | Eca |
| European Directive Compliance: | EU CE Mark, EU Directive 2015/863/EU, EU Directive 2011/65/EU (ROHS II), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16 |
| APAC Compliance: | China RoHS II (GB/T 26572-2011) |

Part Number

| | |
|----------------|------|
| Plenum Number: | 1213 |
|----------------|------|

Variants

| Item # | Color | UPC |
|---------------|--------|--------------|
| 1212 010U1000 | Black | 612825061410 |
| 1212 0061000 | Blue | 612825061519 |
| 1212 0062500 | Blue | 612825061434 |
| 1212 006U1000 | Blue | 612825061427 |
| 1212 008U1000 | Gray | 612825061465 |
| 1212 005U1000 | Green | 612825061441 |
| 1212 003U1000 | Orange | 612825061458 |
| 1212 0091000 | White | 612825061489 |
| 1212 009U1000 | White | 612825061472 |
| 1212 0041000 | Yellow | 612825062189 |
| 1212 004U1000 | Yellow | 612825061496 |

Product Notes

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| Notes: | Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 350 MHz are for Engineering Information Only. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0. |
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History

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| Update and Revision: | Revision Number: 0.308 Revision Date: 07-28-2020 |
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