



**Product:** [1701A](#) 

Category 5E+ Cable, 4 Bonded-Pairs, U/UTP, CMP

## Product Description

Category 5E+ Premise Horizontal Cable (350MHz), 4 Bonded-Pairs, 24 AWG Solid Bare Copper Conductors, U/UTP, Plenum-CMP, Flamarrest® PVC-LS 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 <a href="https://www.belden.com/patents">https://www.belden.com/patents</a> . |

### Construction Details

#### Conductor

| Size   | Stranding | Material         | No. of Pairs |
|--------|-----------|------------------|--------------|
| 24 AWG | Solid     | BC - Bare Copper | 4            |

#### Insulation

| Material                             | Color Code                                                                                                     |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------|
| FEP - Fluorinated Ethylene Propylene | White/Blue Stripe & Blue, White/Orange Stripe & Orange, White/Green Stripe & Green, White/Brown Stripe & Brown |

|              |     |
|--------------|-----|
| Bonded-Pair: | Yes |
|--------------|-----|

#### Outer Jacket

| Material                 | Material Trade Name | Nom. Diameter      | Ripcord |
|--------------------------|---------------------|--------------------|---------|
| PVC - Polyvinyl Chloride | Flamarrest®         | 0.195 in (4.95 mm) | Yes     |

|                                   |                    |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.195 in (4.95 mm) |
|-----------------------------------|--------------------|

### Electrical Characteristics

#### Electricals

| Max. Conductor DCR        | Max. Capacitance Unbalance |
|---------------------------|----------------------------|
| 90 Ohm/km (27 Ohm/1000ft) | 66 pF/100m                 |

#### Delay

| Frequency | Max. Delay    | Max. Delay Skew | Nom. Velocity of Prop. |
|-----------|---------------|-----------------|------------------------|
| 100 MHz   | 537.6 ns/100m | 25 ns/100m      | 72%                    |

#### High Frequency

| Frequency [MHz] | Max. Insertion Loss (Attenuation) | Min. PSNEXT [dB] | Min. PSACR [dB] | Min. PSACRF (PSELFEXT) [dB] | Min. RL (Return Loss) [dB] | Max./Min. Input Impedance (unFitted) [Ohm] | Max./Min. Fitted Impedance [Ohm] | Min. TCL [dB] | Min. ELTCTL [dB] |
|-----------------|-----------------------------------|------------------|-----------------|-----------------------------|----------------------------|--------------------------------------------|----------------------------------|---------------|------------------|
| 1               | 2.0 dB/100m                       | 69.3             | 67.3            | 65.8                        | 20.0                       | 100 ± 12                                   | 105 ± 10                         | 40.0          | 35.0             |
| 4               | 4.0 dB/100m                       | 60.3             | 56.3            | 53.8                        | 23.0                       | 100 ± 12                                   | 100 ± 10                         | 40.0          | 23.0             |
| 8               | 5.7 dB/100m                       | 55.8             | 50.1            | 47.7                        | 24.5                       | 100 ± 12                                   | 100 ± 10                         | 40.0          | 16.9             |
| 10              | 6.4 dB/100m                       | 54.3             | 47.9            | 45.8                        | 25.0                       | 100 ± 12                                   | 100 ± 10                         | 40.0          | 15.0             |
| 16              | 8.1 dB/100m                       | 51.2             | 43.1            | 41.7                        | 25.0                       | 100 ± 12                                   | 100 ± 10                         | 38.0          | 10.9             |
| 20              | 9.1 dB/100m                       | 49.8             | 40.7            | 39.8                        | 25.0                       | 100 ± 12                                   | 100 ± 10                         | 37.0          | 9.0              |
| 25              | 10.2 dB/100m                      | 48.3             | 38.2            | 37.8                        | 25.0                       | 100 ± 15                                   | 100 ± 10                         | 36.0          | 7.0              |
| 31.25           | 11.4 dB/100m                      | 46.9             | 35.5            | 35.9                        | 25.0                       | 100 ± 15                                   | 100 ± 10                         | 35.1          |                  |

|      |              |      |      |      |      |          |          |      |  |
|------|--------------|------|------|------|------|----------|----------|------|--|
| 62.5 | 16.4 dB/100m | 42.4 | 26.0 | 29.9 | 25.0 | 100 ± 15 | 100 ± 10 | 32.0 |  |
| 100  | 21.0 dB/100m | 39.3 | 18.3 | 25.8 | 25.0 | 100 ± 15 | 100 ± 10 | 30.0 |  |
| 155  | 26.6 dB/100m | 36.4 | 9.8  | 22.0 | 19.0 | 100 ± 18 | 100 ± 10 | 28.1 |  |
| 200  | 30.4 dB/100m | 34.8 | 4.4  | 19.8 | 19.0 | 100 ± 18 | 100 ± 10 | 27.0 |  |
| 250  | 34.4 dB/100m | 32.3 |      | 17.8 | 18.0 | 100 ± 20 | 100 ± 10 | 26.0 |  |
| 300  | 38.0 dB/100m | 28.1 |      | 14.3 | 18.0 | 100 ± 20 | 100 ± 10 |      |  |
| 350  | 41.4 dB/100m | 27.1 |      | 12.9 | 17.0 | 100 ± 20 | 100 ± 10 |      |  |
| 400  | 44.5 dB/100m | 26.3 |      | 11.8 | 17.0 | 100 ± 22 | 100 ± 10 |      |  |
| 450  | 47.6 dB/100m | 25.5 |      | 10.7 | 17.0 | 100 ± 22 | 100 ± 10 |      |  |

Voltage

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

Mechanical Characteristics

Temperature

| UL Temperature | 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. |
|-----------------|-------------------|
| 0.5 in (13 mm)  | 2.0 in (51 mm)    |

|                    |                |
|--------------------|----------------|
| Max. Pull Tension: | 40 lbs (18 kg) |
| Bulk Cable Weight: | 22 lbs/1000ft  |

Standards and Compliance

|                                       |                                                                                                                                                     |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Environmental Suitability:            | Plenum, Indoor                                                                                                                                      |
| Sustainability:                       | Product Lens™, Environmental Product Declaration (EPD) Available                                                                                    |
| Flammability / Reaction to Fire:      | NFPA 262, UL 910 (Plenum), FT6, IEC 60332-1-2                                                                                                       |
| CPR Compliance:                       | CPR Euroclass: Eca; CPR UKCA Class: Eca                                                                                                             |
| NEC / UL Compliance:                  | Article 800, CMP                                                                                                                                    |
| CEC / C(UL) Compliance:               | CMP                                                                                                                                                 |
| ICEA Compliance:                      | S-90-661                                                                                                                                            |
| 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                                                                                                                        |
| Third Party Performance Verification: | Category 5e                                                                                                                                         |
| ISO/IEC Compliance:                   | ISO/IEC 11801-1, IEC 61156-5                                                                                                                        |
| CENELEC Compliance:                   | Segregation class according EN50174-2 = a                                                                                                           |
| European Directive Compliance:        | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16 |
| UK Regulation Compliance:             | UKCA Mark                                                                                                                                           |
| APAC Compliance:                      | China RoHS II (GB/T 26572-2011)                                                                                                                     |
| Non-Plenum Number:                    | 1700A                                                                                                                                               |

Product Notes

|        |                                                                                                                                                                                                                                                                      |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 Markings from Max. Put-Up Length to 0. |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

History

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.517 Revision Date: 09-07-2025 |
|----------------------|--------------------------------------------------|

Part Numbers

Variants

| Item #         | Color | Putup Type | Length   | UPC          | Footnote |
|----------------|-------|------------|----------|--------------|----------|
| 1701A 0101000  | Black | Reel       | 1,000 ft | 612825121862 |          |
| 1701A 010U1000 | Black | UnReel     | 1,000 ft | 612825121855 | C        |

|                |         |        |          |              |   |
|----------------|---------|--------|----------|--------------|---|
| 1701A D151000  | Blue    | Reel   | 1,000 ft | 612825121718 | C |
| 1701A D15U1000 | Blue    | UnReel | 1,000 ft | 612825121701 |   |
| 1701A D153000  | Blue    | Reel   | 3,000 ft | 612825121725 | C |
| 1701A 0081000  | Gray    | Reel   | 1,000 ft | 612825121824 | C |
| 1701A 008U1000 | Gray    | UnReel | 1,000 ft | 612825121817 |   |
| 1701A 0051000  | Green   | Reel   | 1,000 ft | 612825121800 | C |
| 1701A 005U1000 | Green   | UnReel | 1,000 ft | 612825121794 |   |
| 1701A 8771000  | Natural | Reel   | 1,000 ft | 612825121886 | C |
| 1701A 877U1000 | Natural | UnReel | 1,000 ft | 612825121879 |   |
| 1701A 8773000  | Natural | Reel   | 3,000 ft | 612825121893 | C |
| 1701A 0031000  | Orange  | Reel   | 1,000 ft | 612825121763 | C |
| 1701A 003U1000 | Orange  | UnReel | 1,000 ft | 612825121756 |   |
| 1701A B021000  | Purple  | Reel   | 1,000 ft | 612825121695 | C |
| 1701A B02U1000 | Purple  | UnReel | 1,000 ft | 612825121688 |   |
| 1701A 0021000  | Red     | Reel   | 1,000 ft | 612825121749 | C |
| 1701A 002U1000 | Red     | UnReel | 1,000 ft | 612825121732 |   |
| 1701A 0091000  | White   | Reel   | 1,000 ft | 612825121848 | C |
| 1701A 009U1000 | White   | UnReel | 1,000 ft | 612825121831 |   |
| 1701A 0041000  | Yellow  | Reel   | 1,000 ft | 612825121787 | C |
| 1701A 004U1000 | Yellow  | UnReel | 1,000 ft | 612825121770 |   |

|           |                        |
|-----------|------------------------|
| Footnote: | C - CRATE REEL PUT-UP. |
|-----------|------------------------|

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