

# Product: 1885ENH

Category 7 Enhanced Cable, 4 Pair, S/FTP, LSZH Indoor CPR Dca

## Product Description

Category 7 Enhanced Premise Horizontal Cable (1000MHz), 4-Pair, 23 AWG solid bare copper conductors, S/FTP, Foam Polyethylene insulation, each pair with Beldfoil® shield, overall tinned copper braid shield (30% coverage), LSZH jacket

## Technical Specifications

### Product Overview

| | |
|---|---|
| Suitable Applications: | Horizontal and building backbone cable; Support current and future Category 6a and 7 applications, such as: 10GBase-T (10 Gigabit Ethernet), 1000Base-T (Gigabit Ethernet), 100 Base-T, 10 Base-T, FDDI, ATM |
| Patent: | This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/patents. |

### Construction Details

**Conductor**

| Element | Size | Stranding | Material | No. of Pairs |
|---|---|---|---|---|
| Individual Shielded Pair | 23 AWG | Solid | BC - Bare Copper | 4 |

**Insulation**

| Element | Material | Nom. Insulation Diameter | Color Code |
|---|---|---|---|
| Individual Shielded Pair | PE - Polyethylene (Foam) | 1.4 mm (0.055 in) | White & Blue, White & Orange, White & Green, White & Brown |

**Cable Core**

| Description |
|---|
| 4 shielded pairs twisted together |

**Inner Shield**

| Element | Shield Type | Material | Coverage |
|---|---|---|---|
| Individual Shielded Pair | Tape | Bi-Laminate (Alum+Poly) | 100% |

| | |
|---|---|
| Table Notes: | Aluminum facing outside |

**Outer Shield**

| Shield Type | Material | Coverage |
|---|---|---|
| Braid | Tinned Copper (TC) | 30% |

**Outer Jacket**

| Material | Nom. Diameter | Ripcord |
|---|---|---|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 7.0 mm (0.28 in) | Yes |

| | |
|---|---|
| Overall Cable Diameter (Nominal): | 7.0 mm (0.28 in) |

### Electrical Characteristics

**Electricals**

| Max. Conductor DCR | Max. Mutual Capacitance | Max. Capacitance Unbalance | Nom. Characteristic Impedance |
|---|---|---|---|
| 95 Ohm/km (29 Ohm/1000ft) | 56 pF/m (17 pF/ft) | 160 pF/100m | 100 Ohm |

**Delay**

| Max. Delay Skew | Nom. Velocity of Prop. |
|---|---|

| | |
|---|---|
| 25 ns/100m | 78% |

**High Frequency**

| 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] | Min. TCL [dB] | Min. ELTCTL [dB] |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 dB/100m | 78 | 75 | 76 | 73 | 78 | 75 | 20 | 40 | 35 |
| 4 | 3.7 dB/100m | 78 | 75 | 74.3 | 71.3 | 78 | 75 | 23 | 34 | 23 |
| 10 | 5.9 dB/100m | 78 | 75 | 72.1 | 69.1 | 75.3 | 72.3 | 25 | 30 | 15 |
| 16 | 7.4 dB/100m | 78 | 75 | 70.6 | 67.6 | 71.2 | 68.2 | 25 | 28 | 10.9 |
| 31.2 | 10.4 dB/100m | 78 | 75 | 67.6 | 64.6 | 65.4 | 62.4 | 23.6 | 25.1 | 5.1 |
| 62.5 | 14.9 dB/100m | 75.5 | 72.5 | 60.6 | 57.6 | 59.4 | 56.4 | 21.5 | 22 | |
| 100 | 19 dB/100m | 72.4 | 69.4 | 53.4 | 50.4 | 55.3 | 52.3 | 20.1 | 20 | |
| 125 | 21.4 dB/100m | 70.9 | 67.9 | 49.6 | 46.6 | 53.4 | 50.4 | 19.4 | 19 | |
| 200 | 27.5 dB/100m | 67.9 | 64.9 | 40.4 | 37.4 | 49.3 | 46.3 | 18 | 17 | |
| 250 | 31 dB/100m | 66.4 | 63.4 | 35.5 | 32.5 | 47.3 | 44.3 | 17.3 | 16 | |
| 300 | 34.2 dB/100m | 65.2 | 62.2 | 31.1 | 28.1 | 45.8 | 42.8 | 17.3 | | |
| 600 | 50.1 dB/100m | 60.7 | 57.7 | 10.6 | 7.6 | 39.7 | 36.7 | 17.3 | | |
| 1000 | 66.9 dB/100m | 57.4 | 54.4 | | | 35.3 | 32.3 | 15.1 | | |

| | |
|---|---|
| Table Notes: | Limits below 4 MHz are for information only.; Values at 1000 MHz are for information only. Reference standard: IEC 61156-5 |

**Transfer Impedance**

| Frequency | Max. Transfer Impedance |
|---|---|
| 1 Mhz | Max. 50 mOhm/m |
| 10 Mhz | Max. 100 mOhm/m |
| 30 Mhz | Max. 200 mOhm/m |
| 100 Mhz | Max. 1000 mOhm/m |

| | |
|---|---|
| Transfer Impedance Class: | Grade 2 |
| Screening Class: | Type Ib |
| Table Notes: | Coupling Attenuation |

**Voltage**

| Voltage Rating |
|---|
| 72 V DC |

## Mechanical Characteristics

**Temperature**

| Operating | Installation |
|---|---|
| -30°C to +60°C | 0°C To +50°C |

**Bend Radius**

| Stationary Min. | Installation Min. |
|---|---|
| 29 mm (1.1 in) | 58 mm (2.3 in) |

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|---|---|
| Max. Pull Tension: | 85 N (19 lbf) |
| Bulk Cable Weight: | 47 kg/km (32 lbs/1000ft) |

## Standards and Compliance

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|---|---|
| Environmental Suitability: | Indoor - Euroclass Dca |
| Flammability / Reaction to Fire: | IEC 60332-1-2 |
| CPR Compliance: | CPR Euroclass: Dca-s2,d1,a1 |
| IEEE Compliance: | PoE: IEEE 802.3bt Type 1, Type 2, Type 3, Type 4 |
| Data Category: | Category 7 |
| TIA/EIA Compliance: | ANSI/TIA 568.2-D |
| ISO/IEC Compliance: | ISO/IEC 11801-1IEC 61156-5, IEC 61034-2 - Smoke Density Min Transmittance = 60% |
| CENELEC Compliance: | EN 50173-1, Segregation class according EN50174-2 = d |
| European Halogen Free Standards: | IEC 62821-1 Halogen Free Compliance = Yes, IEC 60754-1 - Halogen Amount = Zero, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 2.5 µS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3 |
| European Directive Compliance: | EU CE Mark |
| UK Regulation Compliance: | UKCA Mark |

## Product Notes

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| Notes: | Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. |

## History

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| Update and Revision: | Revision Number: 0.365 Revision Date: 04-22-2025 |

## Part Numbers

**Variants**

| Item # | Color | Putup Type | Length | EAN |
|---|---|---|---|---|
| 1885ENH.01B100 | Blue | Flat Box | 100 m | 8719605004642 |
| 1885ENH.01500 | Blue | Reel | 500 m | 8719605004635 |
| 1885ENH.011000 | Blue | Reel | 1,000 m | 8719605004628 |
| 1885ENH 08500M | Gray | Reel | 500 m | |
| 1885ENH.00B100 | Gray, RAL 7032 | Flat Box | 100 m | 8719605004611 |
| 1885ENH.03500 | Gray, RAL 7032 | Reel | 500 m | 8719605004673 |
| 1885ENH.K0500 | Gray, RAL 7032 | Reel | 500 m | 8719605170347 |
| 1885ENH.001000 | Gray, RAL 7032 | Reel | 1,000 m | 8719605004604 |
| 1885ENH.K6500 | Green | Reel | 500 m | 8719605170354 |
| 1885ENH.05500 | Orange | Reel | 500 m | 8719605004697 |
| 1885ENH.051000 | Orange | Reel | 1,000 m | 8719605155559 |
| 1885ENH.04500 | Red | Reel | 500 m | 8719605004680 |
| 1885ENH 002500M | Red | Reel | 500 m | 6938935091319 |
| 1885ENH 007500M | Violet (Purple) | Reel | 500 m | 6938935091388 |
| 1885ENH.02500 | Yellow | Reel | 500 m | 8719605004666 |
| 1885ENH.021000 | Yellow | Reel | 1,000 m | 8719605004659 |

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