



**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 <a href="https://www.belden.com/patents">https://www.belden.com/patents</a> .                                   |

#### Construction Details

##### Conductor

| Element                  | Size   | Stranding | Material         | No. of Pairs | No. of Elements |
|--------------------------|--------|-----------|------------------|--------------|-----------------|
| Individual Shielded Pair | 23 AWG | Solid     | BC - Bare Copper | 4            | 8               |

##### 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          | 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             |

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

## Standards and Compliance

|                                  |  |
|----------------------------------|--|
| 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 11801-1, IEC 61034-2 - Smoke Density Min Transmittance = 60%   |
| GENELEC 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

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

## History

Update and Revision: Revision Number: 0.351 Revision Date: 04-12-2023

## 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.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.02500  | Yellow         | Reel       | 500 m   | 8719605004666 |
| 1885ENH.021000 | Yellow         | Reel       | 1,000 m | 8719605004659 |

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