



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 https://www.belden.com/patents .

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
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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)
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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.
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History

Update and Revision:	Revision Number: 0.515 Revision Date: 04-29-2024
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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	

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