



Product: [1701A](#)

CAT5E+ Horizontal Bonded-Pair, 4pr, UTP, LS-PVC Jkt, CMP

Product Description

CAT5e+ (350MHz), 4-Bonded-pairs, U/UTP-unshielded, Plenum-CMP, Premise Horizontal cable, 24 AWG solid bare copper conductors, FEP insulation, ripcord, Flamarrest® PVC jacket.

Technical Specifications

Product Overview

Suitable Applications:	Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, Noisy Environments
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Physical Characteristics (Overall)

Conductor

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

Conductor Count: 8

Total Number of Pairs: 4

Insulation

Material
FEP - Fluorinated Ethylene Propylene

Bonded-Pair: Yes

Color Chart

Number	Color
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Outer Jacket Material

Material	Material Trade Name	Nominal Diameter	Ripcord
PVC-LS - Polyvinyl Chloride (Low Smoke)	Flamarrest®	0.195 in	Yes

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. DCR Unbalance
90 Ohm/km	3 %

Capacitance

Max. Capacitance Unbalance	Nom. Mutual Capacitance
66 pF/100m	15 pF/ft

Delay

Frequency [MHz]	Max. Delay	Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
100 MHz	537.6 ns/100m	25 ns/100m	72%

High Freq

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)	Max./Min. Fitted Impedance	Min. TCL [dB]	Min. ELTCTL [dB]
1 MHz	2.0 dB/100m	69.3 dB	67.3 dB	65.8 dB	20.0 dB	100 ± 12 Ohm	105 ± 10 Ohm	40.0 dB	35.0 dB
4 MHz	4.0 dB/100m	60.3 dB	56.3 dB	53.8 dB	23.0 dB	100 ± 12 Ohm	100 ± 10 Ohm	40.0 dB	23.0 dB
8 MHz	5.7 dB/100m	55.8 dB	50.1 dB	47.7 dB	24.5 dB	100 ± 12 Ohm	100 ± 10 Ohm	40.0 dB	16.9 dB
10 MHz	6.4 dB/100m	54.3 dB	47.9 dB	45.8 dB	25.0 dB	100 ± 12 Ohm	100 ± 10 Ohm	40.0 dB	15.0 dB
16 MHz	8.1 dB/100m	51.2 dB	43.1 dB	41.7 dB	25.0 dB	100 ± 12 Ohm	100 ± 10 Ohm	38.0 dB	10.9 dB
20 MHz	9.1 dB/100m	49.8 dB	40.7 dB	39.8 dB	25.0 dB	100 ± 12 Ohm	100 ± 10 Ohm	37.0 dB	9.0 dB
25 MHz	10.2 dB/100m	48.3 dB	38.2 dB	37.8 dB	25.0 dB	100 ± 15 Ohm	100 ± 10 Ohm	36.0 dB	7.0 dB
31.25 MHz	11.4 dB/100m	46.9 dB	35.5 dB	35.9 dB	25.0 dB	100 ± 15 Ohm	100 ± 10 Ohm	35.1 dB	
62.5 MHz	16.4 dB/100m	42.4 dB	26.0 dB	29.9 dB	25.0 dB	100 ± 15 Ohm	100 ± 10 Ohm	32.0 dB	
100 MHz	21.0 dB/100m	39.3 dB	18.3 dB	25.8 dB	25.0 dB	100 ± 15 Ohm	100 ± 10 Ohm	30.0 dB	
155 MHz	26.6 dB/100m	36.4 dB	9.8 dB	22.0 dB	19.0 dB	100 ± 18 Ohm	100 ± 10 Ohm	28.1 dB	
200 MHz	30.4 dB/100m	34.8 dB	4.4 dB	19.8 dB	19.0 dB	100 ± 18 Ohm	100 ± 10 Ohm	27.0 dB	
250 MHz	34.4 dB/100m	32.3 dB		17.8 dB	18.0 dB	100 ± 20 Ohm	100 ± 10 Ohm	26.0 dB	
300 MHz	38.0 dB/100m	28.1 dB		14.3 dB	18.0 dB	100 ± 20 Ohm	100 ± 10 Ohm		
350 MHz	41.4 dB/100m	27.1 dB		12.9 dB	17.0 dB	100 ± 20 Ohm	100 ± 10 Ohm		
400 MHz	44.5 dB/100m	26.3 dB		11.8 dB	17.0 dB	100 ± 22 Ohm	100 ± 10 Ohm		
450 MHz	47.6 dB/100m	25.5 dB		10.7 dB	17.0 dB	100 ± 22 Ohm	100 ± 10 Ohm		

Segregation class according EN50174-2:

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Voltage

UL Voltage Rating

300 V RMS

Temperature Range

Installation Temp Range:	0°C To +50°C
UL Temp Rating:	75°C
Storage Temp Range:	-20°C To +75°C
Operating Temp Range:	-20°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	22 lbs/1000ft
Max. Pull Tension:	40 lbs
Min Bend Radius During Installation:	2.0 in
Min Bend Radius/Minor Axis:	0.5 in

Standards

NEC/(UL) Compliance:	CMP
CEC/C(UL) Compliance:	CMP
IEC Compliance:	11801 ed 2.1 (2008) Class D
CPR Euroclass:	Eca
Data Category:	Category 5e
ANSI Compliance:	S-90-661-2012 Category 5e, ANSI/NEMA WC-63.1 Category 5e
TIA/EIA Compliance:	ANSI/TIA-568-C.2 Category 5e
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3
Third Party Performance Verification:	Category 5e

Applicable Environmental and Other Programs

Environmental Space:	Plenum
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes

EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	Yes
EU CE Mark:	Yes
EU REACH SVHC Compliance (yyyy-mm-dd):	2017-07-10
EU RoHS Compliance Date (yyyy-mm-dd):	2005-01-01
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	No
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Non-Halogenated:	No
Suitability - Oil Resistance:	No
Suitability - Outdoor:	No
Suitability - Sunlight Resistance:	No

Flammability, LSOH, Toxicity Testing

C(UL) Flammability:	FT6
UL Flammability:	NFPA 262 Plenum (UL 910)
CSA Flammability:	FT6
IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Yes
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Part Number

Non-Plenum Number:	1700A
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Variants

Item #	Color	Putup Type	Length	UPC
1701A 0101000	Black	Reel	1,000 ft	612825121862
1701A 010U1000	Black	UnReel	1,000 ft	612825121855
1701A D151000	Blue	Reel	1,000 ft	612825121718
1701A D15U1000	Blue	UnReel	1,000 ft	612825121701
1701A D153000	Blue	Reel	3,000 ft	612825121725
1701A 0081000	Gray	Reel	1,000 ft	612825121824
1701A 008U1000	Gray	UnReel	1,000 ft	612825121817
1701A 0051000	Green	Reel	1,000 ft	612825121800
1701A 005U1000	Green	UnReel	1,000 ft	612825121794
1701A 8771000	Natural	Reel	1,000 ft	612825121886
1701A 877U1000	Natural	UnReel	1,000 ft	612825121879
1701A 8773000	Natural	Reel	3,000 ft	612825121893
1701A 0031000	Orange	Reel	1,000 ft	612825121763
1701A 003U1000	Orange	UnReel	1,000 ft	612825121756
1701A B021000	Purple	Reel	1,000 ft	612825121695
1701A B02U1000	Purple	UnReel	1,000 ft	612825121688
1701A 0021000	Red	Reel	1,000 ft	612825121749
1701A 002U1000	Red	UnReel	1,000 ft	612825121732
1701A 0091000	White	Reel	1,000 ft	612825121848
1701A 009U1000	White	UnReel	1,000 ft	612825121831
1701A 0041000	Yellow	Reel	1,000 ft	612825121787
1701A 004U1000	Yellow	UnReel	1,000 ft	612825121770

Footnote:	C - CRATE REEL PUT-UP.
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Patent:	https://www.belden.com/resources/patents
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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: 0.359 Revision Date: 04-28-2020
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