



Part Number: 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

Environmental Space:	Plenum
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

Physical Characteristics (Overall)

Conductor

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

Conductor Count:	8
Total Number of Pairs:	4
Conductor Size:	24 AWG

Insulation

Material
FEP - Fluorinated Ethylene Propylene

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
LS PVC - Low Smoke Polyvinyl Chloride	Flamarrest®	0.195 in	Yes

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. DCR Unbalance
9 Ohm/100m	3 %

Capacitance

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

Shielding:	U/UTP - Unshielded
------------	--------------------

Delay

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		

Voltage

UL Voltage Rating
300V 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 Recommended Pulling Tension:	40 lbs
Min Bend Radius/Minor Axis:	0.5 in
Min Bend Radius/Installation:	2.0 in

Standards

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
ISO/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
Telecommunications Standards:	ANSI/TIA-568-C.2 Category 5e
IEEE Specification:	POE per 802.3af & POE+ per 802.3at-2009
Third Party Performance Verification:	Category 5e

Applicable Environmental and Other Programs

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
CA Prop 65 (CJ for Wire & Cable):	Yes
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
UL Voltage Rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Yes
---------------	-----

Part Number

Non-Plenum Number:	1700A
--------------------	-------

Variants

Item #	Color	Footnote
1701A 0101000	BLACK	
1701A 010U1000	BLACK	C
1701A D151000	BLUE	C
1701A D153000	BLUE	C
1701A D15U1000	BLUE	
1701A 0081000	GRAY	C
1701A 008U1000	GRAY	
1701A 0051000	GREEN	C
1701A 005U1000	GREEN	
1701A 8771000	Natural	C
1701A 8773000	Natural	C
1701A 877U1000	Natural	
1701A 0031000	ORANGE	C
1701A 003U1000	ORANGE	
1701A B021000	PURPLE	C
1701A B02U1000	PURPLE	
1701A 0021000	RED	C
1701A 002U1000	RED	
1701A 0091000	WHITE	C
1701A 009U1000	WHITE	
1701A 0041000	YELLOW	C
1701A 004U1000	YELLOW	

Footnote:	C - CRATE REEL PUT-UP.
Patent:	http://www.belden.com/p

© 2018 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.