

Part Number: 1700A



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

Product Description

CAT5e+ (350MHz), 4-Bonded-Pair, U/UTP-unshielded, Riser-CMR, Premise Horizontal cable, 24 AWG solid bare copper conductors, polyolefin insulation, ripcord, PVC jacket

Technical Specifications

Product Overview

Environmental Space:	Riser
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 ^ US Patent #s 5606151; 5734126, CMR, Riser

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
24	Solid	BC - Bare Copper	4
Conductor Count:		8	
Total Number of Pairs:		4	
Condu	Conductor Size:		24 AWG

Insulation



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	Nominal Diameter	Ripcord
PVC - Polyvinyl Chloride	0.202 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	70 %		

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:	CMR
CEC/C(UL) Specification:	CMR
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):	2004-01-01
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, LS0H, Toxicity Testing

C(UL) Flammability:	FT4
UL Flammability:	UL 1666 Riser
ISO/IEC Flammability:	60332-1
UL Voltage Rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	1701A

Part Number

Variants

Item #	Color	Footnote
1700A 0101000	BLACK	С
1700A 010U1000	BLACK	
1700A 0061640	BLUE	С
1700A 0063000	BLUE	С
1700A 006U1000	BLUE	
1700A.00305	GRAY	
1700A 008U1000	GRAY	
1700A F2V1000	GRAY	С
1700A F2V3000	GRAY	С
1700A F2VU1000	GRAY	
1700A 0051000	GREEN	С
1700A 005U1000	GREEN	
1700A 0031000	ORANGE	С
1700A 003U1000	ORANGE	
1700A B021000	PURPLE	С
1700A B02U1000	PURPLE	
1700A 0021000	RED	С
1700A 0023000	RED	С
1700A 002U1000	RED	
1700A 0091000	WHITE	С
1700A 0093000	WHITE	С
1700A 009U1000	WHITE	С
1700A 004U1000	YELLOW	

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

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