

## 1700A Multi-Conductor - Enhanced Category 5E Bonded-Pair Cable



For more Information  
please call

1-800-Belden1



### General 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

### Usage (Overall)

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, CMR, Riser

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
4	24	Solid	BC - Bare Copper

Total Number of Conductors:

8

#### Insulation

Insulation Material:

Insulation Material
PO - Polyolefin

#### Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Outer Jacket Diameter:

Nom. Dia. (in.)
0.200

Outer Jacket Ripcord:

Yes

#### Overall Cable

Overall Nominal Diameter:

0.200 in.

#### Pair

Pair Color Code Chart:

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

### Mechanical Characteristics (Overall)

Storage Temperature Range: -20°C To +75°C

Installation Temperature Range: 0°C To +60°C

Operating Temperature Range: -20°C To +60°C

Bulk Cable Weight: 21 lbs/1000 ft.

Max. Recommended Pulling Tension: 40 lbs.

Min. Bend Radius/Minor Axis: 0.500 in.

Min. Bend/Installation: 2 in.

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### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC(UL) Specification:	CMR
CEC/C(UL) Specification:	CMR
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Telecommunications Standards:	Category 5e - TIA 568.C.2
Other Specification:	NEMA WC-63.1 Category 5e, UL Verified to Category 5e

#### Applicable Patents:

Country
www.belden.com/p

#### Flame Test

UL Flame Test:	UL 1666 Vertical Riser
C(UL) Flame Test:	FT4
IEC Flame Test:	60332-3-24 (Category C)
IEEE Flame Test:	1202

#### Plenum/Non-Plenum

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

### Electrical Characteristics (Overall)

#### Nom. Mutual Capacitance:

Capacitance (pF/ft)
15

Maximum Capacitance Unbalance (pF/100 m):	66
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#### Nominal Velocity of Propagation:

VP (%)
70

#### Maximum Delay:

Delay (ns/100 m)
510

#### Max. Delay Skew:

Delay Skew (ns/100 m)
25

#### Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
9

#### Max. Operating Voltage - UL:

Voltage
300 V RMS

#### Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)
3

### Electrical Characteristics-Premise (Overall)

#### Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. PSNEXT (dB)	Min. PSACR (dB)	Min RL (dB)
1	2.000	69.3	67.3	20.000
4	4.000	60.3	56.3	23.000

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8	5.700	55.8	50.1	24.500
10	6.400	54.3	47.9	25.000
16	8.100	51.2	43.1	25.000
20	9.100	49.8	40.7	25.000
25	10.200	48.3	38.2	25.000
31.25	11.400	46.9	35.5	25.000
62.5	16.400	42.4	26.0	25.000
100	21.000	39.3	18.3	25.000
155	26.600	36.4	9.8	19.000
200	30.400	34.8	4.4	19.000
250	34.400	32.3	>0	18.000
300	38.000	28.1		18.000
350	41.400	27.1		17.000
400	44.500	26.3		17.000
450	47.600	25.5		17.000

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. PSACRF (dB)
1	100 ± 12	105 ± 10	65.8
4	100 ± 12	100 ± 10	53.8
8	100 ± 12	100 ± 10	47.7
10	100 ± 12	100 ± 10	45.8
16	100 ± 12	100 ± 10	41.7
20	100 ± 12	100 ± 10	39.8
25	100 ± 15	100 ± 10	37.8
31.25	100 ± 15	100 ± 10	35.9
62.5	100 ± 15	100 ± 10	29.9
100	100 ± 15	100 ± 10	25.8
155	100 ± 18	100 ± 10	22.0
200	100 ± 18	100 ± 10	19.8
250	100 ± 20	100 ± 10	17.8
300	100 ± 20	100 ± 10	14.3
350	100 ± 22	100 ± 10	12.9
400	100 ± 22	100 ± 10	11.8
450	100 ± 22	100 ± 10	10.7

Premise Cable Electrical Table 4:

Frequency (MHz)	Min. TCL (dB)	Min. ELTCTL (dB)
1.000	40.000	35.000
4.000	40.000	23.000
8.000	40.000	16.900
10.000	40.000	15.000
16.000	38.000	10.900
20.000	37.000	9.000
25.000	36.000	7.000
31.250	35.100	
62.500	32.000	
100.000	30.000	
155.000	28.100	
200.000	27.000	
250.000	26.000	

### Notes (Overall)

**Notes:** Belden IBDN. Jacket sequentially marked at 2 ft. intervals. Third party verified to ANSI/TIA-568-C.2 Category 5e. Values above 350 MHz are for Engineering Information Only

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1700A B02U1000	1,000 FT	22.000 LB	PURPLE		CAT5E+ 4PRB U/UTP CMR BOX
1700A B021000	1,000 FT	22.000 LB	PURPLE	C	CAT5E+ 4PRB U/UTP CMR REEL
1700A F2VU1000	1,000 FT	22.000 LB	GRAY, DEC		CAT5E+ 4PRB U/UTP CMR BOX
1700A F2V1000	1,000 FT	22.000 LB	GRAY, DEC	C	CAT5E+ 4PRB U/UTP CMR REEL
1700A F2V3000	3,000 FT	66.000 LB	GRAY, DEC	C	CAT5E+ 4PRB U/UTP CMR REEL
1700A 002U1000	1,000 FT	22.000 LB	RED		CAT5E+ 4PRB U/UTP CMR BOX
1700A 0021000	1,000 FT	22.000 LB	RED	C	CAT5E+ 4PRB U/UTP CMR REEL
1700A 0023000	3,000 FT	66.000 LB	RED	C	CAT5E+ 4PRB U/UTP CMR REEL
1700A 003U1000	1,000 FT	22.000 LB	ORANGE		CAT5E+ 4PRB U/UTP CMR BOX
1700A 0031000	1,000 FT	22.000 LB	ORANGE	C	CAT5E+ 4PRB U/UTP CMR REEL

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1700A 004U1000	1,000 FT	22.000 LB	YELLOW		CAT5E+ 4PRB U/UTP CMR BOX
1700A 005U1000	1,000 FT	22.000 LB	GREEN, DARK		CAT5E+ 4PRB U/UTP CMR BOX
1700A 0051000	1,000 FT	22.000 LB	GREEN, DARK	C	CAT5E+ 4PRB U/UTP CMR REEL
1700A 006U1000	1,000 FT	22.000 LB	BLUE, LIGHT		CAT5E+ 4PRB U/UTP CMR BOX
1700A 0061640	1,640 FT	36.080 LB	BLUE, LIGHT	C	CAT5E+ 4PRB U/UTP CMR REEL
1700A 0063000	3,000 FT	66.000 LB	BLUE, LIGHT	C	CAT5E+ 4PRB U/UTP CMR REEL
1700A 008U1000	1,000 FT	21.000 LB	GRAY		CAT5E+ 4PRB U/UTP CMR BOX
1700A 009U1000	1,000 FT	22.000 LB	WHITE	C	CAT5E+ 4PRB U/UTP CMR BOX
1700A 0091000	1,000 FT	22.000 LB	WHITE	C	CAT5E+ 4PRB U/UTP CMR REEL
1700A 0093000	3,000 FT	66.000 LB	WHITE	C	CAT5E+ 4PRB U/UTP CMR REEL
1700A 010U1000	1,000 FT	22.000 LB	BLACK		CAT5E+ 4PRB U/UTP CMR BOX
1700A 0101000	1,000 FT	22.000 LB	BLACK	C	CAT5E+ 4PRB U/UTP CMR REEL

**Notes:**  
C = CRATE REEL PUT-UP.

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