

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



For more Information
please call

1-800-Belden1

**Description:**

24 AWG bonded-pairs solid bare copper conductors, non-plenum, Polyolefin insulation, rip cord, see color code chart (below), PVC jacket (red, orange, white, black, yellow, green, blue, purple, light gray or gray).

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 | US Patent #'s 5, 606, 151; 5, 734, 126

Physical Characteristics (Overall)**Conductor****AWG:**

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

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 Ripcord:

Yes

Overall Cabling**Overall Nominal Diameter:**

5.080 mm

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)**Bulk Cable Weight:**

43.158 Kg/Km

Max. Recommended Pulling Tension:

177.928 N

Min. Bend Radius (Install)/Minor Axis:

25.400 mm

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

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM, UL444
CEC/C(UL) Specification:	CM
Other Standards:	11801 Category 5
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:	568-B.2 Category 5e
Other Specification:	NEMA WC-63.1 Category 5e, UL Verified to Category 5e

Flame Test

UL Flame Test:	UL1685 UL Loading
CSA Flame Test:	FT1

Plenum/Non-Plenum

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

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/m)

49.215

Maximum Capacitance Unbalance (pF/100 m): 66

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

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

Electrical Characteristics-Premise (Overall)

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min RL (dB)
1	2.000	68.3	68.3	66.3	66.3	20.000
4	4.000	59.3	59.3	55.3	55.3	23.000
8	5.700	54.8	54.8	49.1	49.1	24.500
10	6.400	53.3	53.3	46.9	46.9	25.000
16	8.100	50.3	50.3	42.2	42.2	25.000
20	9.100	48.8	48.8	39.7	39.7	25.000
25	10.200	47.3	47.3	37.1	37.1	25.000
31.25	11.400	45.9	45.9	34.5	34.5	25.000
62.5	16.400	41.4	41.4	25.0	25.0	25.000
100	21.000	38.3	38.3	17.3	17.3	25.000
155	26.600	35.4	35.4	8.8	8.8	19.000
200	30.500	33.8	33.8	3.3	3.3	19.000
250	34.300	32.3	32.3	>0	>0	18.000
300	38.000	28.2	28.2			18.000
350	41.400	27.2	27.2			17.000

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ACRF (dB)	Min. PSACRF (dB)
1	100 ± 12	105 ± 10	64.8	64.8
4	100 ± 12	100 ± 10	52.8	52.8
8	100 ± 12	100 ± 10	46.7	46.7
10	100 ± 12	100 ± 10	44.8	44.8
16	100 ± 12	100 ± 10	40.7	40.7
20	100 ± 12	100 ± 10	38.8	38.8
25	100 ± 15	100 ± 10	36.8	36.8
31.25	100 ± 15	100 ± 10	34.9	34.9
62.5	100 ± 15	100 ± 10	28.9	28.9
100	100 ± 15	100 ± 10	24.8	24.8
155	100 ± 18	100 ± 10	21.0	21.0
200	100 ± 18	100 ± 10	18.8	18.8
250	100 ± 20	100 ± 10	16.8	16.8
300	100 ± 20	100 ± 10	14.2	11.2
350	100 ± 22	100 ± 10	12.9	9.9

Premise Cable Electrical Table 3:

Frequency (MHz)	Min. TCL (dB)	Min. ELTCTL (dB)
1	40.0	35.0
4	40.0	23.0
8	40.0	16.9
10	40.0	15.0
16	38.0	10.9
20	37.0	9.0
25	36.0	7.0
31.25	35.1	
62.5	32.0	
100	30.0	
155	28.1	
200	27.0	
250	26.0	

Notes (Overall)

Notes: Belden IBDN. Jacket sequentially marked at 2 ft. intervals. U.S. Patents 5424491, 5606151 and 5734126. Third party verified to TIA/EIA-568-B.2, Category 5e

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
--------	-------	-------------	-------	-------	-----------

METRIC MEASUREMENT VERSION

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

1700A B02U1000	305 MT	9.525 KG	PURPLE		4 PR #24 DATATWIST FR PVC
1700A B021000	305 MT	9.979 KG	PURPLE	C	4 PR #24 DATATWIST FR PVC
1700A F2VU1000	305 MT	9.525 KG	GRAY, DEC		4 PR #24 DATATWIST FR PVC
1700A F2V1000	305 MT	9.979 KG	GRAY, DEC	C	4 PR #24 DATATWIST FR PVC
1700A F2V3000	914 MT	28.576 KG	GRAY, DEC	C	4 PR #24 DATATWIST FR PVC
1700A 002U1000	305 MT	9.525 KG	RED		4 PR #24 DATATWIST FR PVC
1700A 0021000	305 MT	9.979 KG	RED	C	4 PR #24 DATATWIST FR PVC
1700A 0023000	914 MT	28.576 KG	RED	C	4 PR #24 DATATWIST FR PVC
1700A 003U1000	305 MT	9.525 KG	ORANGE		4 PR #24 DATATWIST FR PVC
1700A 0031000	305 MT	9.979 KG	ORANGE	C	4 PR #24 DATATWIST FR PVC
1700A 004U1000	305 MT	9.525 KG	YELLOW		4 PR #24 DATATWIST FR PVC
1700A 0041000	305 MT	9.979 KG	YELLOW	C	4 PR #24 DATATWIST FR PVC
1700A 005U1000	305 MT	9.525 KG	GREEN, DARK		4 PR #24 DATATWIST FR PVC
1700A 0051000	305 MT	9.979 KG	GREEN, DARK	C	4 PR #24 DATATWIST FR PVC
1700A 006U1000	305 MT	9.525 KG	BLUE, LIGHT		4 PR #24 DATATWIST FR PVC
1700A 0061000	305 MT	9.979 KG	BLUE, LIGHT	C	4 PR #24 DATATWIST FR PVC
1700A 0061640	500 MT	16.366 KG	BLUE, LIGHT	C	4 PR #24 DATATWIST FR PVC
1700A 0063000	914 MT	28.576 KG	BLUE, LIGHT	C	4 PR #24 DATATWIST FR PVC
1700A 008U1000	305 MT	9.525 KG	GRAY		4 PR #24 DATATWIST FR PVC
1700A 009U1000	305 MT	9.525 KG	WHITE	C	4 PR #24 DATATWIST FR PVC
1700A 0091000	305 MT	9.979 KG	WHITE	C	4 PR #24 DATATWIST FR PVC
1700A 0093000	914 MT	28.576 KG	WHITE	C	4 PR #24 DATATWIST FR PVC
1700A 010U1000	305 MT	9.525 KG	BLACK		4 PR #24 DATATWIST FR PVC
1700A 0101000	305 MT	9.979 KG	BLACK	C	4 PR #24 DATATWIST FR PVC

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 4 Revision Date: 08-25-2010

© 2010 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 herein 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 "AS IS" 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 EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure 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. This 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.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.