### **ENGLISH MEASUREMENT VERSION**



## 1700R 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, Polyolefin Insulation, Rip Cord, 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

# **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 Diameter:**

Nom. Dia. (in.) 0.202

Outer Jacket Ripcord: Yes

## **Overall Cable**

Overall Nominal Diameter: 0.202 in.

### **Pair**

# Pair Color Code Chart:

Number	Color
1	White/Blue Stripe & Blue
White/Orange Stripe & Orange Stripe & Green	

## **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-20°C To +80°C
Bulk Cable Weight:	21 lbs/1000 ft.
Max. Recommended Pulling Tension:	40 lbs.





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Min. Bend Radius (Install)/Minor Axis: 1 in.

Min. Bend Radius (install)/Minor Axis:	
Applicable Specifications and Agency Co	ompliance (Overall)
Applicable Standards & Environmental Prog	rams
NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMR
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:	Category 5e - TIA 568.C.2
Other Specification:	NEMA WC-63.1 Category 5e, UL Verified to Category 5e
Flame Test	
UL Flame Test:	UL1666 Riser
C(UL) Flame Test:	FT4
IEC Flame Test:	60332-3-22 (Category A)
IEEE Flame Test:	1202
Suitability	
Suitability - Indoor:	Yes

No

1701A

# **Electrical Characteristics (Overall)**

Nom. Mutual Capacitance:

Plenum Number:

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

Capacitance (pF/ft)
15

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





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#### Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)

# **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	68.3	66.3	20.000
4	4.000	59.3	55.3	23.000
8	5.700	54.8	49.1	24.500
10	6.400	53.3	46.9	25.000
16	8.100	50.3	42.2	25.000
20	9.100	48.8	39.7	25.000
25	10.200	47.3	37.1	25.000
31.25	11.400	45.9	34.5	25.000
62.5	16.400	41.4	25.0	25.000
100	21.000	38.3	17.3	25.000
155	26.600	35.4	8.8	19.000
200	30.500	33.8	3.3	19.000
250	34.300	32.3	>0	18.000
300	38.000	28.2		18.000
350	41.400	27.2		17.000

#### **Premise Cable Electrical Table 2:**

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

#### **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. U.S. Patents 5424491, 5606151 and 5734126. Third party verified to TIA/EIA-568-C.2, Category 5e.







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

#### **Related Documents:**

No related documents are available for this product

### **Put Ups and Colors:**

Item # Putup Ship Weight Color Notes Item Desc	
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