**METRIC MEASUREMENT VERSION** 



## 1501A Multi-Conductor - Enhanced Category 5e Nonbonded-Pair Cable



For more Information please call

1-800-Belden1



## **General Description:**

CAT5e+ (350MHz), 4-Pair, U/UTP-Unshielded, Plenum-CMP, Premise Horizontal Cable, 24 AWG solid bare copper conductors, Dual FRPO/FEP insulation, Ripcord, Flamarrest® 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

## **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**

FRPO/FEP - Flame Retardant Polyolefin/Fluorinated Ethylene Propylene

### **Outer Shield**

## **Outer Shield Material:**

Outer Shield Material
Unshielded

### **Outer Jacket**

### **Outer Jacket Material:**

Outer Jacket Trade Name	Outer Jacket Material
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride

Outer Jacket Ripcord: Yes

### **Overall Cable**

Overall Nominal Diameter: 4.826 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)**

Operating Temperature Range:	-20°C To +75°C
Bulk Cable Weight:	35.717 Kg/Km
Max. Recommended Pulling Tension:	155.687 N
Min. Bend Radius/Minor Axis:	12.700 mm

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## 1501A Multi-Conductor - Enhanced Category 5e Nonbonded-Pair Cable

pplicable Standards & Environmental Progr	rams
CEC/C(UL) Specification:	CMP
EU Directive 2011/65/EU (ROHS II):	Yes
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):	01/01/2005
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, Third party verified to Category 5e
lame Test	
UL Flame Test:	NFPA 262
CSA Flame Test:	FT6
uitability	
Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Aerial:	No
Suitability - Burial:	No
Sunlight Resistance:	No
Oil Resistance:	No
Non-halogenated:	No
lenum/Non-Plenum	
Non-Plenum Number:	1500R, 1500A

### Electrical Characteristics (Overall

Nom. Mutual Capacitance:

Capacitance (pF/m) 49.215

Maximum Capacitance Unbalance (pF/100 m): 200

**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) 8.900

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## Max. Operating Voltage - UL:

Voltage 300 V RMS

### Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)

## **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	70.3	68.3	68.3	66.3	20.000
4	4.000	61.3	59.3	57.63	55.3	23.000
8	5.700	56.8	54.8	51.1	49.1	24.500
10	6.400	55.3	53.3	48.9	40.9	25.000
16	8.100	52.2	50.2	44.1	42.1	25.000
20	9.100	50.8	48.8	41.7	39.7	25.000
25	10.200	49.3	47.3	39.1	37.1	24.300
31.25	11.400	47.9	45.9	36.5	34.5	23.600
62.5	16.400	43.4	41.4	27.0	25.0	21.500
100	21.000	40.3	38.3	19.3	17.3	20.100
155	26.600	37.4	35.4	10.9	8.9	18.800
200	30.500	35.8	33.8	5.3	3.3	18.000
250	34.400	34.3	32.3	0		17.300
300	38.000	33.1	31.1			16.800
350	41.400	32.1	30.1			16.300
400	44.600	31.3	29.3			15.900

### Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
16	100 ± 15	100 ± 10	43.7	40.7
4	100 ± 15	100 ± 10	55.7	52.7
8	100 ± 15	100 ± 10	49.7	46.7
10	100 ± 15	100 ± 10	47.8	44.8
16	100 ± 15	100 ± 10	43.7	40.7
20	100 ± 15	100 ± 10	41.7	38.7
25	100 ± 15	100 ± 10	39.8	36.8
31.25	100 ± 15	100 ± 10	37.9	34.9
62.5	100 ± 15	100 ± 10	31.9	28.9
100	100 ± 15	100 ± 10	27.8	24.8
155	100 ± 22	100 ± 10	24.0	21.0
200	100 ± 22	100 ± 10	21.8	18.8
250			19.8	16.8
300			18.3	15.3
350			16.9	13.9
400				

## **Notes (Overall)**

Notes: Jacket sequentially marked at 2 ft. intervals. Third party verified to TIA/EIA-568-B.2, Category 5e. Values above 250 MHz are for Engineering Information Only.

## **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc	
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Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications

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