# **Detailed Specifications & Technical Data**



METRIC MEASUREMENT VERSION

## 1500A 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, Riser-CMR, Premise Horizontal Cable, 24 AWG solid bare copper conductors, non-plenum, Polyolefin insulation, Ripcord, PVC jacket.

sage (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			
hysical Characteristics (Overall)				
Conductor AWG:				
# PairsAWGStrandingConductor Material424SolidBC - Bare Copper				
Total Number of Conductors:	8			
Insulation Material: Insulation Material PO - Polyolefin Duter Shield Outer Shield Material: Outer Shield Material Unshielded Duter Jacket Outer Jacket Material: Outer Jacket Material PVC - Polyvinyl Chloride				
Outer Jacket Ripcord:	Yes			
Overall Cable Overall Nominal Diameter:	5.080 mm			
Pair Pair Color Code Chart:				
Number Color				
1 White/Blue Stripe & Blue				
1White/Blue Stripe & Blue2White/Orange Stripe & Orange				
1White/Blue Stripe & Blue2White/Orange Stripe & Orange3White/Green Stripe & Green4White/Brown Stripe & Brown				
1White/Blue Stripe & Blue2White/Orange Stripe & Orange3White/Green Stripe & Green	-20°C To +80°C			

Operating Temperature Range:	-20°C 10 +80°C
Bulk Cable Weight:	31.252 Kg/Km
Max. Recommended Pulling Tension:	155.687 N
Min. Bend Radius/Minor Axis:	12.700 mm

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NEC/(UL) Specification:	CMR
NEC Articles:	800
CEC/C(UL) Specification:	CMR
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):	01/01/2004
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:	ANSI/TIA/EIA-568-B.2 Category 5e
Other Specification:	NEMA WC-63.1 Category 5e, UL Verified to Category 5e
ame Test	
UL Flame Test:	UL1666 Riser, UL1685 FT4/IEEE 1202 Vertical Tray Flame Test
CSA Flame Test:	FT4
itability	
Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Burial:	No
Sunlight Resistance:	No
Oil Resistance:	No
Non-halogenated:	No
enum/Non-Plenum	1504.0
Plenum Number:	1501A
ctrical Characteristics (Overall)	
m. Mutual Capacitance: Capacitance (pF/m)	
49.215	
Maximum Capacitance Unbalance (pF/100 m):	200
minal Velocity of Propagation:	
<b>VP (%)</b> 70	
ximum Delay:	
Delay (ns/100 m) 542.000	
x. Delay Skew: Delay Skew (ns/100 m)	

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DCR @ 20°C (Ohm/100 m) 8.900

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. 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	57.3	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	46.9	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)
1	100 ± 15	105 ± 10	67.8	64.8
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	100 ± 22	100 ± 10	19.8	16.8
300		100 ± 10		
310		100 ± 10		
350		100 ± 10		

### 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. US Patent 5424491.

Put Ups and	Colors:					
Item #	Putup	Ship Weight	Color	Notes	Item Desc	



#### 1500A Multi-Conductor - Enhanced Category 5e Nonbonded-Pair Cable

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