

2158AE Multi-Conductor - Category 5e Nonbonded-Pair Cable



For more Information
please call

1-800-Belden1



General Description:

CAT5e (200MHz), 4-Pair, U/UTP-Unshielded, Riser-CMR, Premise Horizontal Cable, 24 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Ripcord, PVC Jacket.

Usage (Overall)

Suitable Applications: Horizontal, 1000BaseT, Gigabit Ethernet, 100BaseTX, Fast Ethernet, 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
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. (mm)
4.826

Outer Jacket Ripcord: Yes

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

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Bulk Cable Weight:	26.788 Kg/Km
Max. Recommended Pulling Tension:	155.687 N
Min. Bend Radius/Minor Axis:	20.320 mm
Min. Bend/Installation:	48.260 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMR, FPLP
NEC Articles:	800
CEC/C(UL) Specification:	CMR
EU Directive 2011/65/EU (ROHS II):	Yes
Other Standards:	ISO/IEC 11801 ed 2.1 (2008) Class D
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

Applicable Patents:

Country
www.belden.com/p

Flame Test

UL Flame Test:	UL1666 Vertical Riser
C(UL) Flame Test:	FT4
CSA Flame Test:	FT4
IEEE Flame Test:	1202

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Aerial:	No
Suitability - Burial:	No
Sunlight Resistance:	No
Oil Resistance:	No
Non-halogenated:	No

Plenum/Non-Plenum

Plenum (Y/N):	No
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Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/m)
49.215

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Maximum Capacitance Unbalance (pF/100 m): 330

Nominal Velocity of Propagation:

VP (%)

70

Maximum Delay:

Delay (ns/100 m)

538 @ 100MHz

Max. Delay Skew:

Delay Skew (ns/100 m)

45

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)

9.38

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	65.3	62.3	63.0	60.3	20.000
4	4.100	56.3	53.3	51.0	49.2	23.000
8	5.800	51.8	48.8	46.0	43.0	24.500
10	6.500	50.3	47.3	43.0	40.8	25.000
16	8.200	47.3	44.3	39.0	36.0	25.000
20	9.300	45.8	42.8	36.5	33.5	25.000
25	10.400	44.3	41.3	33.9	30.9	24.300
31.25	11.700	42.9	39.9	31.0	28.2	23.600
62.5	17.000	38.4	35.4	22.0	19.0	21.500
100	22.000	35.3	32.3	14.0	10.3	20.100
155	28.100	32.5	29.5	4.4	1.4	15.800
200	32.400	30.8	27.8	4.0	1.0	15.000

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	63.8	60.8
4	100 ± 15	51.7	48.7
8	100 ± 15	45.7	42.7
10	100 ± 15	43.8	40.8
16	100 ± 15	39.7	36.7
20	100 ± 15	37.7	34.7
25	100 ± 15	35.8	32.8
31.25	100 ± 15	33.9	30.9
62.5	100 ± 15	27.8	24.9
100	100 ± 15	23.8	20.8
155	100 ± 25	19.9	16.9
200	100 ± 25	17.7	14.7

Notes (Overall)

Notes: Jacket sequentially marked at 2 ft. intervals. Third party verified to ANSI/TIA-568-C.2, Category 5e. Values above 100 MHz are for engineering purposes only.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
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METRIC MEASUREMENT VERSION

2158AE Multi-Conductor - Category 5e Nonbonded-Pair Cable

2158AE 0061000	1,000 FT	20.000 LB	BLUE, LIGHT		4 PR #24 PO PVC
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