



Product: [2158PE](#)

Nurse Call System, SimplexGrinnell™ CAT5E, CMP

Product Description

CAT5e (200MHz), 4-Pair, U/UTP-Unshielded, Premise Horizontal Cable, 24 AWG Solid Bare Copper Conductors, Dual FRPO/FEP Insulation, Ripcord, Flamarrest® Jacket, CMP rated.

Technical Specifications

Product Overview

Suitable Applications:	Nurse Call System, Category data
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
24	Solid	BC - Bare Copper	4

Conductor Count:	8
Total Number of Pairs:	4

Insulation

Material
FEP - Fluorinated Ethylene Propylene

Bonded-Pair:	No
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Color Chart

Number	Color
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Outer Jacket Material

Material	Nominal Diameter	Ripcord
PVC - Polyvinyl Chloride	0.190 in	Yes

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. DCR Unbalance
93.8 Ohm/km	5.0 %

Capacitance

Max. Capacitance Unbalance	Nom. Mutual Capacitance
330 pF/100m	15 pF/ft

Delay

Frequency [MHz]	Max. Delay	Max. Delay Skew
100 MHz	537.6 ns/100m	45 ns/100m

High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACRF (ELFEXT) [dB]	Min. RL (Return Loss) [dB]	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance
1 MHz	2.0 dB/100m	65.3 dB	62.3 dB	63.8 dB	20 dB	100 +/- 15 Ohm	100 +/- 15 Ohm
4 MHz	4.1 dB/100m	56.3 dB	53.3 dB	51.8 dB	23 dB	100 +/- 15 Ohm	100 +/- 15 Ohm
8 MHz	5.8 dB/100m	51.8 dB	48.8 dB	45.7 dB	24.5 dB	100 +/- 15 Ohm	100 +/- 15 Ohm
10 MHz	6.5 dB/100m	50.3 dB	47.3 dB	43.8 dB	25 dB	100 +/- 15 Ohm	100 +/- 15 Ohm
16 MHz	8.2 dB/100m	47.2 dB	44.2 dB	39.7 dB	25 dB	100 +/- 15 Ohm	100 +/- 15 Ohm
20 MHz	9.3 dB/100m	45.8 dB	42.8 dB	37.8 dB	25 dB	100 +/- 15 Ohm	100 +/- 15 Ohm
25 MHz	10.4 dB/100m	44.3 dB	41.3 dB	35.8 dB	24.3 dB	100 +/- 15 Ohm	100 +/- 15 Ohm
31.25 MHz	11.7 dB/100m	42.9 dB	39.9 dB	33.9 dB	23.6 dB	100 +/- 15 Ohm	100 +/- 15 Ohm
62.5 MHz	17.0 dB/100m	38.4 dB	35.4 dB	27.9 dB	21.5 dB	100 +/- 15 Ohm	100 +/- 15 Ohm
100 MHz	22.0 dB/100m	35.3 dB	32.3 dB	23.8 dB	20.1 dB	100 +/- 15 Ohm	100 +/- 15 Ohm
155 MHz	28.1 dB/100m		29.4 dB				
200 MHz	32.4 dB/100m		27.8 dB				

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

Installation Temp Range:	0°C to +50°C
UL Temp Rating:	75°C
Storage Temp Range:	-20°C to +75°C
Operating Temp Range:	-20°C to +75°C

Mechanical Characteristics

Bulk Cable Weight:	20 lbs/1000ft
Max. Pull Tension:	25 lbs
Min Bend Radius During Installation:	2.0 in
Min Bend Radius/Minor Axis:	1.0 in

Standards

NEC/(UL) Compliance:	CMP
CEC/C(UL) Compliance:	CMP
IEC Compliance:	11801 ed 2.2 (2011) Class D
ANSI Compliance:	S-90-661-2012 Category 5e, ANSI/NEMA WC-63.1 Category 5e
TIA/EIA Compliance:	ANSI/TIA-568-C.2 Category 5e
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3
Third Party Performance Verification:	Category 5e

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU CE Mark:	Yes
EU REACH SVHC Compliance (yyyy-mm-dd):	2017-07-10
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01

Suitability

Suitability - Aerial:	No
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Non-Halogenated:	No
Suitability - Oil Resistance:	No
Suitability - Outdoor:	No

Suitability - Sunlight Resistance:	No
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Flammability, LSOH, Toxicity Testing

UL Flammability:	NFPA 262 Plenum
CSA Flammability:	FT6

Plenum/Non-Plenum

Plenum (Y/N):	Yes
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Part Number

Non-Plenum Number:	2158AE
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Variants

Item #	Color	Putup Type	Length	UPC
2158PE 0061000	Blue, Light	Reel	1,000 ft	612825130642

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system.
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History

Update and Revision:	Revision Number: 0.51 Revision Date: 04-03-2020
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