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1-800-Belden1



General Description:

Brilliance® Tactical 5e CatSnake® Patch Data Cable (100 MHz), 4 Bonded-Pair, U/UTP-Unshielded, 24 AWG Stranded Bare Copper Conductors, Polyolefin Insulation, Flexible PVC Jacket

Usage (Overall)

Suitable Applications: Field Deployable Cat 5e Patch, CobraNet, eSnake, Ethersound, Digital Audio over Ethernet

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
4	24	7x32	BC - Bare Copper	0.024

Total Number of Conductors: 8

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
PO - Polyolefin	0.041

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 0.250 in.

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:	-30°C To +75°C
Installation Temperature Range:	0°C To +60°C
Operating Temperature Range:	-30°C To +75°C
Bulk Cable Weight:	26 lbs/1000 ft.
Max. Recommended Pulling Tension:	40 lbs.
Min. Bend Radius/Minor Axis:	2.500 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	02/20/2006
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

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Aerial:	No
Suitability - Hazardous Locations:	No
Sunlight Resistance:	Yes
Oil Resistance:	Yes - When supported by messenger wire
Non-halogenated:	No

Plenum/Non-Plenum

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

Nom. Mutual Capacitance:

Capacitance (pF/ft)
15

Maximum Capacitance Unbalance (pF/100 m): 330

Nominal Velocity of Propagation:

VP (%)
70

Maximum Delay:

Start Freq. (MHz)	Delay (ns/100 m)
100.000	537.600

Typical Delay Skew:

Delay Skew (ns/ft)
15.000

Max. Delay Skew:

Delay Skew (ns/100 m)
45.000

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
25.000

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
9.380

Max. Operating Voltage - UL:

Voltage
300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)
5.000

Electrical Characteristics-Premise (Overall)

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. PSACR (dB)	Min RL (dB)
1	2.400	65.3	62.3	62.9	20.000
4	4.900	56.3	53.3	51.5	23.000
8	6.890	51.8	48.8	45.0	24.500
10	7.780	50.3	47.3	42.6	25.000
16	9.900	47.2	44.2	37.5	25.000
20	11.100	45.8	42.8	34.8	25.000

25	12.500	44.3	41.3	31.9	24.300
31.25	14.100	42.9	39.9	29.0	23.600
62.5	20.400	38.4	35.5	18.3	21.500
100	26.400	35.3	32.3	9.2	20.100
155	33.700	32.4	29.4	0	18.800
200	38.900	30.8	27.8		18.000
250	44.200	29.3	26.3		17.300
300	49.200	28.1	25.1		16.800
310	50.100	27.9	24.9		16.700
350	53.800	27.1	24.1		16.300

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	105 ± 10	63.8	60.8
4	100 ± 15	100 ± 10	51.8	48.8
8	100 ± 15	100 ± 10	45.7	42.7
10	100 ± 15	100 ± 10	43.8	40.8
16	100 ± 15	100 ± 10	39.7	36.7
20	100 ± 15	100 ± 10	37.8	34.8
25	100 ± 15	100 ± 10	35.8	32.8
31.25	100 ± 15	100 ± 10	33.9	30.9
62.5	100 ± 15	100 ± 10	27.9	24.9
100	100 ± 15	100 ± 10	23.8	20.8
155	100 ± 18	100 ± 10	20.0	17.0
200	100 ± 20	100 ± 10	17.8	14.8
250	100 ± 20	100 ± 10	15.8	12.8
300	100 ± 20	100 ± 10	14.3	11.3
310	100 ± 20	100 ± 10	14.0	11.0
350	100 ± 22	100 ± 10	12.9	9.9

Notes (Overall)

Notes: EtherNet/IP is a trademark of ControlNet International, Ltd. under license by Open DeviceNet Vendor Association, Inc. Operating temperatures are subject to length de-rating in Addition To 20% length Derating for Patch Cable Insertion Loss. -30C Cold Bend Per UL1581. Data Above 100MHz For Engineering Information Only.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1304A B591000	1,000 FT	28.000 LB	BLACK, MATTE		4 PR #24 PP FRPVC
1304A B59500	500 FT	14.500 LB	BLACK, MATTE		4 PR #24 PP FRPVC

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