Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



1594A Multi-Conductor - Category 5e Nonbonded-Pair Indoor/Outdoor Cable



For more Information please call

1-800-Belden1



General Description:

Min. Bend/Installation:

NEC/(UL) Specification:

CEC/C(UL) Specification:

EU Directive 2011/65/EU (ROHS II):

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

CAT5e (200MHz), 4-Pair, U/UTP-Unshielded, Riser-CMR, CMX Outdoor, Premise Horizontal Cable, 24 AWG solid bare copper conductors, non-plenum, Polyolefin insulation, Ripcord, UV resistant PVC 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:	
# PairsAWGStrandingConductor Material424SolidBC - 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. (in.) 0.220	
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)	
Installation Temperature Range:	-10°C To +60°C
Operating Temperature Range:	-40°C To +60°C
Bulk Cable Weight:	21 lbs/1000 ft.
Max. Recommended Pulling Tension:	35 lbs.
Min Bend Radius/Minor Axis:	1 in

2.200 in.

CMR

Yes

CMR, CMX, UL444

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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
Flame Test	
CSA Flame Test:	FT4
Suitability	
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Burial:	No
Sunlight Resistance:	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	No
Plenum Number:	1585A
Non-Plenum Number:	1583A

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/ft)
15

Maximum Capacitance Unbalance (pF/100 m):

Nominal Velocity of Propagation:

VP (%)

Maximum Delay:

Delay (ns/100 m) 510 @ 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 (%)

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)	Min. SRL (dB)
1	2.0	65.3	62.3	63.0	60.3	20.0	23
4	4.1	56.3	53.3	51.0	49.2	23.0	23.0
8	5.8	51.8	48.8	46.0	43.0	24.5	24.5
10	6.5	50.3	47.3	43.0	40.8	25.0	25.0
16	8.2	47.3	44.3	39.0	36.0	25.0	25.0
20	9.3	45.8	42.8	36.5	33.5	25.0	25.0
25	10.4	44.3	41.3	33.9	30.9	24.3	24.3
31.25	11.7	42.9	39.9	31.0	28.2	23.6	23.6

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62.5	17.0	38.4	35.4	22.0	19.0	21.5	21.5
100	22.0	35.3	32.3	14.0	10.3	20.1	20.1
155	28.1	32.5	29.5	4.4	1.4	15.8	
200	32.0	30.8	27.8	4.0	1.0	15.0	

Premise Cable Electrical Table 2:

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

Notes (Overall)

Notes: Jacket sequentially marked at 2 ft. intervals. Third party verified to TIA/EIA-568-C.2, Category 5e.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1594A 008U1000	1,000 FT	25.000 LB	GRAY		CAT5E 4PR U/UTP CMR/CMX BOX
1594A 009U1000	1,000 FT	25.000 LB	WHITE		CAT5E 4PR U/UTP CMR/CMX BOX
1594A 1GFU1000	1,000 FT	25.000 LB	IVORY 1GF		CAT5E 4PR U/UTP CMR/CMX BOX

Revision Number: 2 Revision Date: 08-14-2013

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product.
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