Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



1594A Multi-Conductor - Category 5e Indoor/Outdoor CMR/CMX Cable



For more Information please call

1-800-Belden1



General Description:

CAT5e (200 MHz), 4 Pair, U/UTP-Unshielded, Indoor/Outdoor CMR-CMX Outdoor, Premise Horizontal Cable, 24 AWG Solid Bare Copper Conductors, 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, Outdoor **Physical Characteristics (Overall)** Conductor AWG: # Pairs AWG Stranding Conductor Material 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. (in.) 0.220 Outer Jacket Ripcord: Yes Pair Pair Color Code Chart: Number Color White/Blue Stripe & Blue White/Orange Stripe & Orange White/Green Stripe & Green White/Brown Stripe & Brown **Mechanical Characteristics (Overall)**

Storage Temperature Range:	-40°C To +75°C
Installation Temperature Range:	-20°C To +75°C
Operating Temperature Range:	-40°C To +75°C
UL Temperature Rating:	90C
Bulk Cable Weight:	21 lbs/1000 ft.
Max. Recommended Pulling Tension:	35 lbs.
Min. Bend Radius/Minor Axis:	1 in.
Min. Bend/Installation:	2.250 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR, CMX, UL444

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CEC/C(UL) Specification:	CMR
EU Directive 2011/65/EU (ROHS II):	Yes
IEEE Specification:	POE per IEEE 802.3af & POE+ per IEEE 802.3at-2009
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
ANSI Specification:	ANSI/TIA 568-C.2 Category 5e and ANSI/ICEA S-90-661-2012 Category 5e
Other Specification:	ANSI/ICEA S-56-434 Outdoor Use, ANSI/ICEA S-100-685 Indoor/Outdoor Use and ANSI/ICEA S-99-689 Broadband Outdoor Use
lame Test	
UL Flame Test:	UL1666 Vertical Riser
uitability	
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Aerial:	Yes - When supported by messenger wire
Suitability - Burial:	No
Sunlight Resistance:	Yes
lenum/Non-Plenum	
Plenum (Y/N):	No
Plenum Number:	1585A
Non-Plenum Number:	1583A
ectrical Characteristics (Overall)	
om. Mutual Capacitance:	



Maximum Capacitance Unbalance (pF/100 m):

330

Nominal Velocity of Propagation:



Maximum Delay:

Delay (ns/100 m) 510 @ 100MHz

Max. Delay Skew:

Delay Skew (ns/100 m)

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	2.000	65.3	62.3	63.3	60.3	20.000	23

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4	4.100	56.3	53.3	52.2	49.2	23.000	23.0
8	5.800	51.8	48.8	46.0	43.0	24.500	24.5
10	6.500	50.3	47.3	43.8	40.8	25.000	25.0
16	8.200	47.3	44.3	39.0	36.0	25.000	25.0
20	9.300	45.8	42.8	36.5	33.5	25.000	25.0
25	10.400	44.3	41.3	33.9	30.9	24.300	24.3
31.25	11.700	42.9	39.9	31.2	28.2	23.600	23.6
62.5	17.000	38.4	35.4	21.4	19.0	21.500	21.5
100	22.000	35.3	32.3	13.3	10.3	20.100	20.1
155	28.100	32.5	29.5	4.4	1.4	15.800	
200	32.400	30.8	27.8			15.000	

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	24.8
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: Third party verified to TIA/EIA-568-C.2, Category 5e, Print Includes Descending Footage / Meter Markings, -40C Cold Bend Compliance Per UL1581.

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

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