



Product: [Giga LAN 10 SD Category 6A CMR](#) 

Category 6A Enhanced Cable, 4 Pair, U/UTP, CMR

Product Description

Category 6A Enhanced Premise Horizontal Cable (625MHz), 4 Pair, 23 AWG Solid Bare Copper Conductors, U/UTP, Riser-CMR, PVC Jacket

Technical Specifications

Product Overview

Suitable Applications:	Premise Horizontal Cable, Ethernet up to 10GBASE-T, Wi-Fi 6, Wi-Fi 5, PoE++, PoE+, PoE, Noisy Environments, Data Center EoR and MoR, Network Backbone, HDBaseT, HDBaseT 4K UHD
Patent:	This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/patents .

Construction Details

Conductor

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

Insulation

Material	Color Code
PO - Polyolefin	White & Blue, White & Orange, White & Green, White & Brown

Outer Jacket

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.275 in (6.99 mm)	Yes

Overall Cable Diameter (Nominal): 0.275 in (6.99 mm)

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
82 Ohm/km (25 Ohm/1000ft)	45 pF/100m

Delay

Frequency	Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.	Typical Delay Skew
100 MHz	537.6 ns/100m	45 ns/100m	65%	30 ns/100m

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation) [dB/100m]	Min. PSNEXT [dB]	Min. PSACR [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Max./Min. Input Impedance (unFitted) [Ohm]	Max./Min. Fitted Impedance [Ohm]	Min. PSANEXT [dB]	Min. PSAACRF [dB]	Min. TCL [dB]	Min. ELTCTL [dB]
1	2.1	75.3	73.2	74.8	20.0	100 ± 15	105 ± 10	75.0	77.0	40.0	35.0
4	3.8	66.3	62.5	62.8	23.0	100 ± 15	100 ± 15	75.0	76.2	40.0	23.0
8	5.3	61.8	56.5	56.7	24.5	100 ± 15	100 ± 15	75.0	70.1	40.0	16.9
10	5.9	60.3	54.4	54.8	25.0	100 ± 15	100 ± 15	75.0	68.2	40.0	15.0
16	7.4	57.2	49.8	50.7	25.0	100 ± 15	100 ± 15	75.0	64.1	38.0	10.9
20	8.3	55.8	47.5	48.8	25.0	100 ± 15	100 ± 15	75.0	62.2	37.0	9.0
25	9.3	54.3	45.0	46.8	24.3	100 ± 15	100 ± 15	75.0	60.2	36.0	7.0
31.25	10.4	52.9	42.5	44.9	23.6	100 ± 15	100 ± 10	75.0	58.3	35.1	5.1

62.5	14.8	48.4	33.6	38.9	21.5	100 ± 15	100 ± 10	73.6	52.3	32.0	
100	18.9	45.3	26.4	34.8	20.1	100 ± 15	100 ± 10	70.5	48.2	30.0	
200	27.0	40.8	13.8	28.8	18.0	100 ± 22	100 ± 10	66.0	42.2	27.0	
250	30.4	39.3	9.0	26.8	17.3	100 ± 32	100 ± 10	64.5	40.2	26.0	
300	33.5	38.1	4.6	25.3	16.8	100 ± 32	100 ± 10	63.3	38.7	25.2	
350	36.3	37.1	0.8	23.9	16.3	100 ± 32	100 ± 10	62.3	37.3	24.6	
400	39.0	36.3		22.8	15.9	100 ± 32	100 ± 10	61.5	36.2	24.0	
450	41.5	35.5		21.7	15.5	100 ± 32	100 ± 10	60.7	35.1	23.5	
500	43.9	34.8		20.8	15.2	100 ± 32	100 ± 10	60.0	34.2	23.0	
550	46.2	33.2		20.0	14.9	100 ± 32	100 ± 10	59.4	33.4		
600	48.4	32.6		19.2	14.7	100 ± 32	100 ± 10	58.8	32.6		
625	49.5	32.4		18.9	14.5	100 ± 32	100 ± 10	58.6	32.3		
750	54.7	32.2		17.3	14.0			57.4	30.7		
860	58.9	31.3		16.1	13.6			56.5	29.5		

Voltage

UL Voltage Rating
300 V (CMR), 300 V (CL3R)

Mechanical Characteristics

Temperature

UL Temperature	Operating	Installation	Storage
90°C	-20°C To +75°C	0°C To +50°C	-20°C To +75°C

Bend Radius

Stationary Min.	Installation Min.
1.25 in (31.8 mm)	2.75 in (69.9 mm)

Max. Pull Tension:	25 lbs (11 kg)
Bulk Cable Weight:	35 lbs/1000ft (52 kg/km)

Standards and Compliance

Environmental Suitability:	Riser, Indoor
Sustainability:	Product Lens™, Environmental Product Declaration (EPD) Available
Flammability / Reaction to Fire:	UL 1666 Riser, FT4, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	Article 800, CMR, CMR-LP (0.6A), CL3R-LP (0.6A)
CEC / C(UL) Compliance:	CMR
ICEA Compliance:	S-116-732
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
NEMA Compliance:	ANSI/NEMA WC-66
Data Category:	Category 6A
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 6A
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61156-5
CENELEC Compliance:	Segregation class according EN50174-2 = a
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 625 MHz are for Engineering Information Only. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0.
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History

Update and Revision:	Revision Number: 0.10 Revision Date: 07-14-2026
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
M59156	Blue, Light	Reel	1,000 ft	799936146578
M59159	Gray	Reel	1,000 ft	799936146608
M59160	Green, Dark	Reel	1,000 ft	799936146615
M59164	Violet	Reel	1,000 ft	799936146653
M59158	Yellow	Reel	1,000 ft	799936146592

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