



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

GigaLAN 10 Cable, 4 Pair, #23 AWG UTP, Category 6A, CMR

Product Description

Unshielded Twisted Pair (UTP) GigaLAN 10 for Use In Horizontal Cabling Systems per ANSI/TIA568-C AND ISO/IEC 11801 ed 2.2 (2011) Class EA. The Cable Exceeds ANSI/TIA-568-C.2 AND ISO/IEC 11801 ed 2.2 (2011) Category 6A Electrical Characteristics. This Patented Cable Consists of #23 AWG Solid Bare Copper Insulated Conductors, Assembled into Four Tightly Twisted Pairs, Utilizing a FlexWeb Core Separator, Alien Crosstalk Barrier and Ripcord, Under a Jacket. Print Includes Descending Footage Markers from 1000 to 0 on Each 1000 FT Reel.

Technical Specifications

Product Overview

Suitable Applications:	Premise Horizontal Cable, 10 Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, Noisy Environments, PoE
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	Solid	BC - Bare Copper	4

Insulation

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

Outer Jacket

Separator	Material	Nom. Diameter
Flexweb® Core Separator, Alien Crosstalk Barrier	PVC - Polyvinyl Chloride	0.260 in (6.60 mm)

Overall Cable Diameter (Nominal):	0.260 in (6.60 mm)
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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.
100 MHz	537.6 ns/100m	45 ns/100m	70%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation) [dB/100m]	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance	Min. PSANEXT [dB]	Min. PSAACRF [dB]	Min. TCL [dB]	Min. ELTCTL [dB]
1	2.1	74.3	72.3	72.2	70.2	67.8	64.8	20.0	100 ± 15 Ohm	100 ± 15 Ohm	67.0	67.0	40.0	35.0
4	3.8	65.3	63.3	61.5	59.5		55.8	23.0	100 ± 15 Ohm	105 ± 10 Ohm	67.0	66.2	40.0	23.0
8	5.3	60.8	58.8	55.4	53.4	49.7	46.7	24.5	100 ± 15 Ohm	105 ± 10 Ohm	67.0	61.1	40.0	16.9
10	5.9	59.3	57.3	53.4	51.4	47.8	44.8	25.0	100 ± 15 Ohm	105 ± 10 Ohm	67.0	58.2	40.0	15.0
16	7.5	56.2	54.2	48.8	46.8	43.7	40.7	25.0	100 ± 15 Ohm	105 ± 10 Ohm	67.0	55.1	38.0	10.9
20	8.4	54.8	52.8	46.4	44.4	41.8	38.8	25.0	100 ± 15 Ohm	105 ± 10 Ohm	67.0	52.2	37.0	9.0

25	9.4	53.3	51.3	44.0	42.0	39.8	36.8	24.3	100 ± 15 Ohm	105 ± 10 Ohm	67.0	50.2	36.0	7.0
31.25	10.5	51.9	49.9	41.4	39.4	37.9	34.9	23.6	100 ± 15 Ohm	105 ± 10 Ohm	67.0	48.3	35.1	5.1
62.5	15.0	47.4	45.4	32.4	30.4	31.9	28.9	21.5	100 ± 15 Ohm	105 ± 10 Ohm	65.6	42.3	32.0	
100	19.1	44.3	42.3	25.2	23.2	27.8	24.8	20.1	100 ± 15 Ohm	105 ± 10 Ohm	62.5	38.2	30.0	
200	27.6	39.8	37.8	12.2	10.2	21.8	18.8	18.0	100 ± 22 Ohm	100 ± 10 Ohm	58.0	32.2	27.0	
250	31.1	38.3	36.3	7.3	5.3	19.8	16.8	17.3	100 ± 32 Ohm	100 ± 10 Ohm	56.5	30.2	26.0	
300	34.3	37.1	35.1	2.9	0.9	18.3	15.3	16.8	100 ± 32 Ohm	100 ± 10 Ohm	55.3	28.7	25.2	
350	37.2	36.1	34.1			16.9	13.9	16.3	100 ± 32 Ohm	100 ± 10 Ohm	54.3	27.3	24.6	
400	40.1	35.3	33.3			15.8	12.8	15.9	100 ± 32 Ohm	100 ± 10 Ohm	53.5	26.2	24.0	
450	42.7	34.5	32.5			14.7	11.7	15.5	100 ± 32 Ohm	100 ± 10 Ohm	52.7	25.1	23.5	
500	45.3	33.8	31.8			13.8	10.8	15.2	100 ± 32 Ohm	100 ± 10 Ohm	52.0	24.2	23.0	

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	+5°C To +50°C	-20°C To +75°C

Bend Radius

Stationary Min.
1 in (25 mm)

Max. Pull Tension:	25 lbs (11 kg)
Bulk Cable Weight:	31 lbs/1000ft (46 kg/km)

Standards and Compliance

Environmental Suitability:	Riser, Indoor
Flammability / Reaction to Fire:	UL 1666 Riser, FT4, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 800, CMR, CMR-LP (0.5A), CL3R-LP (0.5A)
CEC / C(UL) Compliance:	CMR
Data Category:	Category 6A
TIA/EIA Compliance:	ANSI/TIA-568-C.2 Category 6A
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61156-5
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: 2017-07-10
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Plenum Number:	Giga LAN 10 Category 6A CMP

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: 0.49 Revision Date: 07-14-2026
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
M59222RB				799936148862
M59222	Blue, Light		1,000 ft	799936148244
M59224RB	White			799936148886
M59224	White	Reel	1,000 ft	799936148268
M59220	Yellow	Reel	1,000 ft	799936148220

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