



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: 0.51 Revision Date: 07-28-2026
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Part Numbers

Variants

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

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