



Product: [2433](#)

Category 6+ Enhanced Cable, 4 Bonded-Pairs, U/UTP, CMP

Product Description

Category 6+ Enhanced Premise Horizontal Cable (350MHz), 4 Bonded-Pairs, 23 AWG Solid Bare Copper Conductors, U/UTP, Plenum-CMP, Flamarrest® PVC-LS Jacket

Technical Specifications

Product Overview

Suitable Applications:	Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM
Patent:	This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/resources/patents .

Physical Characteristics (Overall)

Conductor

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

Conductor Count:	8
Total Number of Pairs:	4

Insulation

Material	
FEP - Fluorinated Ethylene Propylene	
Bonded-Pair:	N/A

Color Chart

Number	Color
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Outer Jacket Material

Material	Material Trade Name	Nominal Diameter	Ripcord
PVC - Polyvinyl Chloride	Flamarrest®	0.224 in	Yes

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. DCR Unbalance
78 Ohm/km	3.0 %

Capacitance

Max. Capacitance Unbalance	Nom. Mutual Capacitance
330 pF/100m	17 pF/ft

Delay

Max. Delay	Max. Delay Skew

High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance	Min. PSANEXT	Min. PSAACRF
1 MHz	2.0 dB/100m	79.3 dB	77.3 dB	77.3 dB	75.3 dB	70.8 dB	67.8 dB	20.0 dB	100 ± 15	102 ± 15	77.0 dB	67.0 dB
4 MHz	3.7 dB/100m	70.3 dB	68.3 dB	66.5 dB	64.5 dB	58.8 dB	55.8 dB	23.6 dB	100 ± 15	100 ± 15	77.0 dB	66.2 dB
8 MHz	5.3 dB/100m	65.8 dB	63.8 dB	60.5 dB	58.5 dB	52.7 dB	49.7 dB	25.3 dB	100 ± 15	100 ± 15	77.0 dB	60.1 dB
10 MHz	5.9 dB/100m	64.3 dB	62.3 dB	58.4 dB	56.4 dB	50.8 dB	47.8 dB	26.0 dB	100 ± 15	100 ± 15	77.0 dB	58.2 dB
16 MHz	7.4 dB/100m	61.2 dB	59.2 dB	53.8 dB	51.8 dB	46.7 dB	43.7 dB	26.0 dB	100 ± 15	100 ± 15	74.4 dB	54.1 dB
20 MHz	8.3 dB/100m	59.8 dB	57.8 dB	51.4 dB	49.4 dB	44.8 dB	41.8 dB	26.0 dB	100 ± 15	100 ± 15	73.0 dB	52.2 dB
25 MHz	9.4 dB/100m	58.3 dB	56.3 dB	49.0 dB	47.0 dB	42.8 dB	39.8 dB	25.5 dB	100 ± 15	100 ± 15	71.5 dB	50.2 dB
31.25 MHz	10.5 dB/100m	56.9 dB	54.9 dB	46.4 dB	44.4 dB	40.9 dB	37.9 dB	25.0 dB	100 ± 15	100 ± 15	70.1 dB	48.3 dB
62.5 MHz	15.1 dB/100m	52.4 dB	50.4 dB	37.3 dB	35.3 dB	34.9 dB	31.9 dB	23.5 dB	100 ± 15	100 ± 15	65.6 dB	42.3 dB
100 MHz	19.3 dB/100m	49.3 dB	47.3 dB	30.0 dB	28.0 dB	30.8 dB	27.8 dB	22.5 dB	100 ± 15	100 ± 15	62.5 dB	38.2 dB
155 MHz	24.5 dB/100m	46.4 dB	44.4 dB	21.9 dB	19.9 dB	27.0 dB	24.0 dB	21.6 dB	100 ± 22	100 ± 15	58.0 dB	32.2 dB
200 MHz	28.3 dB/100m	44.8 dB	42.8 dB	16.6 dB	14.6 dB	24.8 dB	21.8 dB	21.0 dB	100 ± 22	100 ± 15	56.5 dB	30.2 dB
250 MHz	31.8 dB/100m	43.3 dB	41.3 dB	11.5 dB	9.5 dB	22.8 dB	19.8 dB	20.5 dB	100 ± 32	100 ± 15	55.3 dB	28.7 dB
300 MHz	35.2 dB/100m	42.1 dB	40.1 dB	6.9 dB	4.9 dB	21.3 dB	18.3 dB	20.1 dB	100 ± 32	100 ± 15	54.3 dB	27.3 dB
350 MHz	38.4 dB/100m	41.1 dB	39.1 dB	2.7 dB	0.7 dB	19.9 dB	16.9 dB	19.8 dB	100 ± 32	100 ± 15	53.5 dB	26.2 dB
400 MHz	41.5 dB/100m	40.3 dB	38.3 dB			18.8 dB	15.8 dB	19.5 dB	100 ± 32	100 ± 15	52.7 dB	25.1 dB
450 MHz	44.3 dB/100m	39.5 dB	37.5 dB			17.7 dB	14.7 dB	19.2 dB	100 ± 32	100 ± 15	52.0 dB	24.2 dB
500 MHz	47.1 dB/100m	38.8 dB	36.8 dB			16.8 dB	13.8 dB	19.0 dB	100 ± 32	100 ± 15		
550 MHz	49.7 dB/100m	38.2 dB	36.2 dB			16.0 dB	13.0 dB	18.8 dB	100 ± 32	100 ± 15		

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

Installation Temp Range:	0°C To +50°C
UL Temp Rating:	90°C
Storage Temp Range:	-20°C To +75°C
Operating Temp Range:	-20°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	26 lbs/1000ft
Max. Pull Tension:	25 lbs
Min Bend Radius/Minor Axis:	1.0 in

Standards

NEC/(UL) Compliance:	CMP
CEC/C(UL) Compliance:	CMP
IEC Compliance:	11801 ed 2.2 (2011) Class E
CPR Euroclass:	Eca
Data Category:	Category 6
ANSI Compliance:	S-116-732-2013 Category 6, ANSI/NEMA WC-66 Category 6
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 6
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
Other Compliance:	C(UL)US CMP 90C OR (UL) CMP-LP (0.5A) OR CL3P-LP (0.5A)
Third Party Performance Verification:	Category 6

Applicable Environmental and Other Programs

Environmental Space:	Plenum
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes



EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	Yes
EU CE Mark:	Yes
EU REACH SVHC Compliance (yyyy-mm-dd):	2017-07-10
EU RoHS Compliance Date (yyyy-mm-dd):	2005-10-13

Suitability

Suitability - Aerial:	No
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Non-Halogenated:	No
Suitability - Oil Resistance:	No
Suitability - Outdoor:	No
Suitability - Sunlight Resistance:	No

Flammability, LS0H, Toxicity Testing

UL Flammability:	NFPA 262 Plenum (UL 910)
CSA Flammability:	FT6
IEC Flammability:	IEC 60332-1-2

Plenum/Non-Plenum

Plenum (Y/N):	Yes
---------------	-----

Part Number

Non-Plenum Number:	2432
--------------------	------

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 350 MHz are for Engineering Information Only. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0.
--------	--

History

Update and Revision:	Revision Number: 0.52 Revision Date: 03-16-2021
----------------------	---

© 2021 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

