



**Part Number: 1212**

**Enhanced Category 5E Nonbonded-Pair Cable**

**Product Description**

CAT5e+ (350MHz), 4 Nonbonded-Pairs, U/UTP, Riser-CMR, Premise Horizontal Cable, 24 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Ripcord, PVC Jacket, Sequential Markings at 2 Foot/1 Meter Intervals

**Technical Specifications**

**Product Overview**

Environmental Space:	Riser
Suitable Applications:	Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422

**Physical Characteristics (Overall)**

**Conductor**

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

Conductor Count:	8
Total Number of Pairs:	4

**Insulation**

Material	
PO - Polyolefin	
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	Nominal Diameter	Ripcord
PVC - Polyvinyl Chloride	0.206 in	Yes

**Electrical Characteristics**

**Conductor DCR**

Max. Conductor DCR	Max. DCR Unbalance
89 Ohm/km	3 %

**Capacitance**

Max. Capacitance Unbalance	Nom. Mutual Capacitance
330 pF/100m	15 pF/ft

**Delay**

Frequency [MHz]	Max. Delay	Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
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100 MHz	537.6 ns/100m	25 ns/100m	70 %
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## 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
1 MHz	2.0 dB/100m	70.3 dB	69.3 dB	68.3 dB	67.3 dB	67.8 dB	65.8 dB	20.0 dB	100 ± 15 Ohm	100 ± 15 Ohm
4 MHz	4.0 dB/100m	61.3 dB	60.3 dB	57.3 dB	56.3 dB	55.8 dB	53.8 dB	23.0 dB	100 ± 15 Ohm	100 ± 15 Ohm
8 MHz	5.7 dB/100m	56.8 dB	55.8 dB	51.1 dB	50.1 dB	49.7 dB	47.7 dB	24.5 dB	100 ± 15 Ohm	100 ± 15 Ohm
10 MHz	6.4 dB/100m	55.3 dB	54.3 dB	48.9 dB	47.9 dB	47.8 dB	45.8 dB	25.0 dB	100 ± 15 Ohm	100 ± 15 Ohm
16 MHz	8.1 dB/100m	52.2 dB	51.2 dB	44.1 dB	43.1 dB	43.7 dB	41.7 dB	25.0 dB	100 ± 15 Ohm	100 ± 15 Ohm
20 MHz	9.1 dB/100m	50.8 dB	49.8 dB	41.7 dB	40.7 dB	41.8 dB	39.8 dB	25.0 dB	100 ± 15 Ohm	100 ± 15 Ohm
25 MHz	10.2 dB/100m	49.3 dB	48.3 dB	39.1 dB	38.1 dB	39.8 dB	37.8 dB	24.3 dB	100 ± 15 Ohm	100 ± 15 Ohm
31.25 MHz	11.4 dB/100m	47.9 dB	46.9 dB	36.4 dB	35.4 dB	37.9 dB	35.9 dB	23.6 dB	100 ± 15 Ohm	100 ± 15 Ohm
62.5 MHz	16.4 dB/100m	43.4 dB	42.4 dB	27.0 dB	26.0 dB	31.9 dB	29.9 dB	21.5 dB	100 ± 15 Ohm	100 ± 15 Ohm
100 MHz	21.0 dB/100m	40.3 dB	39.3 dB	19.3 dB	18.3 dB	27.8 dB	25.8 dB	20.1 dB	100 ± 15 Ohm	100 ± 15 Ohm
155 MHz	26.6 dB/100m	37.4 dB	36.4 dB	10.9 dB	9.9 dB	24.0 dB	22.0 dB	18.8 dB	100 ± 22 Ohm	100 ± 15 Ohm
200 MHz	30.5 dB/100m	35.8 dB	34.8 dB	5.3 dB	4.3 dB	21.8 dB	19.8 dB	18.0 dB	100 ± 22 Ohm	100 ± 15 Ohm
250 MHz	34.4 dB/100m	34.3 dB	33.3 dB	-0.1 dB	-1.1 dB	19.8 dB	17.8 dB	17.3 dB	100 ± 32 Ohm	100 ± 15 Ohm
300 MHz	38.0 dB/100m	33.1 dB	32.1 dB			18.3 dB	16.3 dB	14.4 dB	100 ± 32 Ohm	100 ± 15 Ohm
350 MHz	41.4 dB/100m	32.1 dB	31.1 dB			16.9 dB	14.9 dB	13.8 dB	100 ± 32 Ohm	100 ± 15 Ohm
400 MHz	44.6 dB/100m	31.3 dB	30.3 dB			15.8 dB	13.8 dB	13.3 dB	100 ± 32 Ohm	100 ± 15 Ohm
450 MHz	47.7 dB/100m	30.5 dB	29.5 dB			14.7 dB	12.7 dB	12.8 dB	100 ± 32 Ohm	100 ± 15 Ohm

## Voltage

<b>UL Voltage Rating</b>
300 V RMS

## Temperature Range

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

## Mechanical Characteristics

Bulk Cable Weight:	20 lbs/1000ft
Max Recommended Pulling Tension:	25 lbs
Min Bend Radius During Installation:	2.25 in
Min Bend Radius/Minor Axis:	1.0 in

## Standards

NEC Articles:	800
NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMR
ISO/IEC Compliance:	11801 ed 2.2 (2011) Class D
CPR Euroclass:	Eca
Data Category:	Category 5e
ANSI Compliance:	S-90-661-2012 Category 5e, ANSI/NEMA WC-63.1 Category 5e
Telecommunications Standards:	ANSI/TIA-568-C.2 Category 5e
IEEE Specification:	IEEE 802.3bt Type 1, Type 2, Type 3
Third Party Performance Verification:	Category 5e

## Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	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):	2004-01-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

## 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:	UL 1666 Riser
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

## Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	1213

## Part Number

### Variants

Item #	Color	UPC	Length	Footnote
1212.10U305	Black		305 m	
1212 010U1000	Black	612825061410		
1212.06305	Blue		305 m	
1212 0061000	Blue	612825061519		C
1212 0062500	Blue	612825061434		
1212 006U1000	Blue	612825061427		
1212 008U1000	Gray	612825061465		
1212.08U305	Gray		305 m	
1212 005U1000	Green	612825061441		
1212 003U1000	Orange	612825061458		
1212.09305	White		305 m	
1212 0091000	White	612825061489		
1212 009U1000	White	612825061472		
1212 0041000	Yellow	612825062189		
1212 004U1000	Yellow	612825061496		

Footnote:	C - CRATE REEL PUT-UP.
Patent:	<a href="https://www.belden.com/resources/patents">https://www.belden.com/resources/patents</a>

## Product Notes

Notes:	Values above 350 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: 0.264 Revision Date: 08-22-2019
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