



**Product: 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**

Suitable Applications:	Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422
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### **Physical Characteristics (Overall)**

#### Conductor

AWG	Stranding	Material	No. of Pairs
24	Solid	BC - Bare Coppe	er 4
Condu	ctor Count:		8
Total N	Number of Pa	airs:	4

#### Insulation



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) [%]
100 MHz	537.6 ns/100m	25 ns/100m	70 %

## 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

UL Voltage Rating
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:	s: 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**

Environmental Space:	Riser
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
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
1212 010U1000	Black	612825061410
1212 0061000	Blue	612825061519
1212 0062500	Blue	612825061434
1212 006U1000	Blue	612825061427
1212 008U1000	Gray	612825061465
1212 005U1000	Green	612825061441
1212 003U1000	Orange	612825061458
1212 0091000	White	612825061489
1212 009U1000	White	612825061472
1212 0041000	Yellow	612825062189
1212 004U1000	Yellow	612825061496

Footnote:	C - CRATE REEL PUT-UP.
Patent:	https://www.belden.com/resources/patents

### **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.	
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#### **History**

Update and Revision:	Revision Number: 0.275 Revision Date: 04-28-2020

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