



Product: [6663U5](#) 

CAT5E Horizontal Security, 4pr, UTP, LS-PVC Jkt, CMP

Product Description

Surveillance Category 5e Cable, Plenum-CMP, 4-24 AWG solid bare copper pairs with FEP insulation, UTP, Flamarrest® jacket with ripcord

Technical Specifications

Product Overview

Suitable Applications:	Video, Sound and Security, Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155 ATM, 622 ATM, 100MHz CAT5e
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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/FEP - Polyolefin / Fluorinated Ethylene Propylene

Bonded-Pair:	N/A
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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-LS - Polyvinyl Chloride (Low Smoke)	Flamarrest®	0.19 in	Yes

Electrical Characteristics

Conductor DCR

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

Capacitance

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

Delay

Frequency [MHz]	Max. Delay	Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
100 MHz	538 ns/100m	45 ns/100m	72%

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]	Min. SRL (Structural Return Loss)	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance
1 MHz	2 dB/100m	65.3 dB	62.3 dB	63 dB	60.3 dB	63.8 dB	60.8 dB	20 dB	23 dB	100 ± 15	100 ± 15
4 MHz	4.1 dB/100m	56.3 dB	53.3 dB	51 dB	49.2 dB	51.7 dB	48.7 dB	23 dB	23 dB	100 ± 15	100 ± 15
8 MHz	5.8 dB/100m	51.8 dB	48.8 dB	46 dB	43 dB	45.7 dB	42.7 dB	24.5 dB	24.5 dB	100 ± 15	100 ± 15
10 MHz	6.5 dB/100m	50.3 dB	47.3 dB	43 dB	40.8 dB	43.8 dB	40.8 dB	25 dB	25 dB	100 ± 15	100 ± 15
16 MHz	8.2 dB/100m	47.3 dB	44.3 dB	39 dB	36 dB	39.7 dB	36.7 dB	25 dB	25 dB	100 ± 15	100 ± 15
20 MHz	9.3 dB/100m	45.8 dB	42.8 dB	36.5 dB	33.5 dB	37.7 dB	34.7 dB	25 dB	25 dB	100 ± 15	100 ± 15
25 MHz	10.4 dB/100m	44.3 dB	41.3 dB	33.9 dB	30.9 dB	35.8 dB	32.8 dB	24.3 dB	24.3 dB	100 ± 15	100 ± 15
31.25 MHz	11.7 dB/100m	42.9 dB	39.9 dB	31 dB	28.2 dB	33.9 dB	30.9 dB	23.6 dB	23.6 dB	100 ± 15	100 ± 15
62.5 MHz	17 dB/100m	38.4 dB	35.4 dB	22 dB	19 dB	27.8 dB	24.9 dB	21.5 dB	21.5 dB	100 ± 15	100 ± 15
100 MHz	22 dB/100m	35.3 dB	32.3 dB	14 dB	10.3 dB	23.8 dB	20.8 dB	20.1 dB	20.1 dB	100 ± 15	100 ± 15
155 MHz	28.1 dB/100m	32.4 dB	29.4 dB	4.4 dB	1.4 dB	20.0 dB	17.0 dB	18.8 dB			
200 MHz	32.4 dB/100m	30.8 dB	27.8 dB			17.8 dB	14.8 dB	18.0 dB			

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

Installation Temp Range:	0°C To +60°C
UL Temp Rating:	75°C
Storage Temp Range:	-20°C To +60°C
Operating Temp Range:	-20°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	21 lbs/1000ft
Max. Pull Tension:	40 lbs
Min Bend Radius During Installation:	1.9 in
Min Bend Radius/Minor Axis:	0.8 in

Standards

NEC/(UL) Compliance:	CMP
CEC/C(UL) Compliance:	CMP
IEC Compliance:	11801 ed 2.2 (2011) Class D
Data Category:	Category 5e
ANSI Compliance:	S-90-661-2012 Category 5e, ANSI/NEMA WC-63.1 Category 5e
TIA/EIA Compliance:	ANSI/TIA-568-C.2 Category 5e
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3
Other Compliance:	NEMA WC-63.1 Category 5e, ETL Verified to Category 5e
Third Party Performance Verification:	Category 5e

Applicable Environmental and Other Programs

Environmental Space:	Plenum
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):	2009-03-12
MII Order #39 (China RoHS):	Yes

Suitability

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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, LSOH, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Yes
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Part Number

Non-Plenum Number:	5663U5
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Variants

Item #	Color	UPC
6663U5 010U1000	Black	612825178842
6663U5 010U500	Black	612825178859

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Jacket sequentially marked at 2 ft. intervals. Thrid party verified to TIA/EIA-568-B.2, Category 5e.
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History

Update and Revision:	Revision Number: 0.350 Revision Date: 04-28-2020
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