



Product: [5663U6](#)

CAT6 Horizontal Security, 4pr, UTP, PVC Jkt, CMR

Product Description

Surveillance Category 6 Cable, Riser-CMR, 4-23 AWG solid bare copper pairs with polyolefin insulation, UTP, PVC jacket with ripcord

Technical Specifications

Product Overview

Suitable Applications:	Video, Sound & Security, Premise Horizontal Cable, Gigabit Ethernet, 100GazeTX, 100BaseVG ANYLAN, 155 ATM, 622 ATM, 250MHz CAT6
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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	
PO - Polyolefin	
Bonded-Pair:	N/A

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

Outer Jacket		
Material	Nominal Diameter	Ripcord
PVC - Polyvinyl Chloride	0.22 in	Yes

Electrical Characteristics

Conductor DCR	
Max. Conductor DCR	Max. DCR Unbalance
93.8 Ohm/km	5 %

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	537 ns/100m	45 ns/100m	70%

High Frequency

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. TCL [dB]	Min. ELTCTL [dB]
1 MHz	2 dB/100m	74.3 dB	72.3 dB	72.3 dB	70.3 dB	67.8 dB	64.8 dB	20 dB	100 ± 15	100 ± 15	40.0 dB	35.0 dB
4 MHz	3.8 dB/100m	65.3 dB	63.3 dB	61.5 dB	59.5 dB	55.8 dB	52.7 dB	23 dB	100 ± 15	100 ± 15	40.0 dB	23.0 dB
8 MHz	5.3 dB/100m	60.8 dB	58.8 dB	55.4 dB	53.4 dB	49.7 dB	46.7 dB	24.5 dB	100 ± 15	100 ± 15	40.0 dB	16.9 dB
10 MHz	6 dB/100m	59.3 dB	57.3 dB	53.3 dB	51.3 dB	47.8 dB	44.8 dB	25 dB	100 ± 15	100 ± 15	40.0 dB	15.0 dB
16 MHz	7.6 dB/100m	56.2 dB	54.3 dB	48.7 dB	46.7 dB	43.7 dB	40.7 dB	25 dB	100 ± 15	100 ± 15	38.0 dB	10.9 dB
20 MHz	8.5 dB/100m	54.8 dB	52.8 dB	46.3 dB	44.3 dB	41.8 dB	38.8 dB	25 dB	100 ± 15	100 ± 15	37.0 dB	9.0 dB
25 MHz	9.5 dB/100m	53.3 dB	51.3 dB	43.8 dB	41.8 dB	39.8 dB	36.8 dB	24.3 dB	100 ± 15	100 ± 15	36.0 dB	7.0 dB
31.25 MHz	10.7 dB/100m	51.9 dB	49.9 dB	41.2 dB	39.2 dB	37.9 dB	34.9 dB	23.6 dB	100 ± 15	100 ± 15	35.1 dB	5.1 dB
62.5 MHz	15.4 dB/100m	47.4 dB	45.4 dB	32 dB	30 dB	31.9 dB	28.9 dB	21.5 dB	100 ± 15	100 ± 15	32.0 dB	
100 MHz	19.8 dB/100m	44.3 dB	42.3 dB	24.5 dB	22.5 dB	27.8 dB	24.8 dB	20.1 dB	100 ± 15	100 ± 15	30.0 dB	
155 MHz	25.2 dB/100m	41.5 dB	39.5 dB	16.3 dB	14.3 dB	23.9 dB	20.9 dB	18.8 dB	100 ± 20	100 ± 15	28.1 dB	
200 MHz	29 dB/100m	39.8 dB	37.8 dB	10.8 dB	8.8 dB	21.8 dB	18.8 dB	18 dB	100 ± 20	100 ± 15	27.0 dB	
250 MHz	32.8 dB/100m	38.3 dB	36.3 dB	5.5 dB	3.5 dB	19.8 dB	16.8 dB	17.3 dB	100 ± 20	100 ± 15	26.0 dB	

Segregation class according EN50174-2: a

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:	23 lbs/1000ft
Max. Pull Tension:	40 lbs
Min. Bend Radius During Installation:	2.21 in
Min. Bend Radius/Minor Axis:	0.9 in

Standards

NEC/(UL) Compliance:	CMR
CEC/C(UL) Compliance:	CMR
ISO/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:	Category 6 - TIA 568.C.2
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
Other Specification:	Third party Verified to Category 6
Third Party Performance Verification:	Category 6

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 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

MII Order #39 (China RoHS):	Yes
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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

C(UL) Flammability:	FT4
UL Flammability:	UL1666 Vertical Riser
CSA Flammability:	FT4
IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	6663U6

Part Number

Variants

Item #	Color	UPC
5663U6 0101000	Black	612825164852
5663U6 010500	Black	612825164869
5663U6 0091000	White	612825164845

Footnote:	C - CRATE REEL PUT-UP.
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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. Third party verified to ANSI/TIA-568-C.2, Category 6.
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History

Update and Revision:	Revision Number: 0.433 Revision Date: 12-15-2021
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