

6663U5 Multi-Conductor - Compliant Cat 5e for Video, Sound and Security Applications

For more Information
please call

1-800-Belden1

**General Description:**

Surveillance Category Cable, Plenum-CMP, Cat5e, 4-24 AWG Solid Bare Copper Pairs with FEP insulation, UTP, Flamarrest® jacket with ripcord

Usage (Overall)

Suitable Applications:

Video, Sound and Security, Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155 ATM, 622 ATM, 100MHz CAT5e

Physical Characteristics (Overall)**Conductor**

AWG:

# Pairs	AWG	Stranding	Conductor Material
4	24	Solid	BC - Bare Copper

Total Number of Conductors:

8

Insulation

Insulation Material:

Insulation Material
FRPO/FEP - Flame Retardant Polyolefin/Fluorinated Ethylene Propylene

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride

Outer Jacket Ripcord:

Yes

Overall Cable

Overall Nominal Diameter:

0.190 in.

Pair

Pair Color Code Chart:

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

Mechanical Characteristics (Overall)

Storage Temperature Range: -20°C To +60°C

Installation Temperature Range: 0°C To +60°C

Operating Temperature Range: -20°C To +60°C

Bulk Cable Weight: 21 lbs/1000 ft.

Max. Recommended Pulling Tension: 40 lbs.

Min. Bend Radius/Minor Axis: 0.800 in.

Min. Bend/Installation: 1.900 in.

Applicable Specifications and Agency Compliance (Overall)**Applicable Standards & Environmental Programs**

NEC/(UL) Specification: CMP

CEC/C(UL) Specification: CMP

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EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	03/18/2009
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Other Specification:	NEMA WC-63.1 Category 5e, ETL Verified to Category 5e

Applicable Patents:

Country

www.belden.com/p

Flame Test

UL Flame Test:	NFPA 262
CSA Flame Test:	FT6

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Aerial:	No
Suitability - Burial:	No
Sunlight Resistance:	No
Oil Resistance:	No
Non-halogenated:	No

Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	5663U5

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/ft)

15

Maximum Capacitance Unbalance (pF/100 m):	330
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Nominal Velocity of Propagation:

VP (%)

72

Maximum Delay:

Delay (ns/100 m)

538 @ 100MHz

Max. Delay Skew:

Delay Skew (ns/100 m)

45

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)

9.38

Max. Operating Voltage - UL:

Voltage

300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)

3

Electrical Characteristics-Premise (Overall)

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min RL (dB)	Min. SRL (dB)
1	2.000	65.3	62.3	63.0	60.3	20.000	23.0

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4	4.100	56.3	53.3	51.0	49.2	23.000	23.0
8	5.800	51.8	48.8	46.0	43.0	24.500	24.5
10	6.500	50.3	47.3	43.0	40.8	25.000	25.0
16	8.200	47.3	44.3	39.0	36.0	25.000	25.0
20	9.300	45.8	42.8	36.5	33.5	25.000	25.0
25	10.400	44.3	41.3	33.9	30.9	24.300	24.3
31.25	11.700	42.9	39.9	31.0	28.2	23.600	23.6
62.5	17.000	38.4	35.4	22.0	19.0	21.500	21.5
100	22.000	35.3	32.3	14.0	10.3	20.100	20.1

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	63.8	60.8
4	100 ± 15	100 ± 15	51.7	48.7
8	100 ± 15	100 ± 15	45.7	42.7
10	100 ± 15	100 ± 15	43.8	40.8
16	100 ± 15	100 ± 15	39.7	36.7
20	100 ± 15	100 ± 15	37.7	34.7
25	100 ± 15	100 ± 15	35.8	32.8
31.25	100 ± 15	100 ± 15	33.9	30.9
62.5	100 ± 15	100 ± 15	27.8	24.9
100	100 ± 15	100 ± 15	23.8	20.8

Notes (Overall)

Notes: Jacket sequentially marked at 2 ft. intervals. Third party verified to TIA/EIA-568-B.2, Category 5e.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
6663U5 010U1000	1,000 FT	22.000 LB	BLACK		4 PR #24 FRPO/FEP FLRST
6663U5 010U500	500 FT	11.500 LB	BLACK		4 PR #24 FRPO/FEP FLRST

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