

6663U6 Multi-Conductor - Compliant Cat 6 for Video, Sound and Security Applications



For more Information
please call

1-800-Belden1



General Description:

Surveillance Category Cable, Plenum-CMP, Cat6, 4-23 AWG Solid Bare Copper Pairs with FEP insulation, UTP, Flamarrest® jacket with ripcord

Usage (Overall)

Suitable Applications: Video, Sound & Security, Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155 ATM, 622 ATM, 250MHz CAT6

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
4	23	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 Diameter:

Nom. Dia. (in.)
0.225

Outer Jacket Ripcord: Yes

Overall Cable

Overall Nominal Diameter: 0.225 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: 28 lbs/1000 ft.

Max. Recommended Pulling Tension: 40 lbs.

Min. Bend Radius/Minor Axis: 0.900 in.

Min. Bend/Installation: 2.250 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

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NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
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
Telecommunications Standards:	Category 6 - TIA 568.C.2
Other Specification:	Third party Verified to Category 6

Applicable Patents:

Country
www.belden.com/p

Flame Test

UL Flame Test:	NFPA 262 Plenum Flame Test (UL910)(FT6)
CSA Flame Test:	FT6

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Aerial:	No
Suitability - Burial:	No
Sunlight Resistance:	No

Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	5663U6

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/ft)
15

Maximum Capacitance Unbalance:

Capacitance (pF/ft)
330.000

Maximum Capacitance Unbalance (pF/100 m): 330

Nominal Velocity of Propagation:

VP (%)
72

Maximum Delay:

Delay (ns/100 m)
537 @ 100MHz

Max. Delay Skew:

Delay Skew (ns/100 m)
45

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
9.380

Max. Operating Voltage - UL:

Voltage
300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)
5

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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	74.3	72.3	72.3	70.3	20.000	na
4	3.800	65.3	63.3	61.5	59.5	23.000	na
8	5.300	60.8	58.8	55.4	53.4	24.500	na
10	6.000	59.3	57.3	53.3	51.3	25.000	na
16	7.600	56.2	54.3	48.7	46.7	25.000	na
20	8.500	54.8	52.8	46.3	44.3	25.000	na
25	9.500	53.3	51.3	43.8	41.8	24.300	na
31.25	10.700	51.9	49.9	41.2	39.2	23.600	na
62.5	15.400	47.4	45.4	32.0	30.0	21.500	na
100	19.800	44.3	42.3	24.5	22.5	20.100	na
155	25.200	41.5	39.5	16.3	14.3	18.800	na
200	29.000	39.8	37.8	10.8	8.8	18.000	na
250	32.800	38.3	36.3	5.5	3.5	17.300	na

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	67.8	64.8
4	100 ± 15	100 ± 15	55.8	52.7
8	100 ± 15	100 ± 15	49.7	46.7
10	100 ± 15	100 ± 15	47.8	44.8
16	100 ± 15	100 ± 15	43.7	40.7
20	100 ± 15	100 ± 15	41.8	38.8
25	100 ± 15	100 ± 15	39.8	36.8
31.25	100 ± 15	100 ± 15	37.9	34.9
62.5	100 ± 15	100 ± 15	31.9	28.9
100	100 ± 15	100 ± 15	27.8	24.8
155	100 ± 20	100 ± 15	23.9	20.9
200	100 ± 20	100 ± 15	21.8	18.8
250	100 ± 20	100 ± 15	19.8	16.8

Notes (Overall)

Notes: Jacket sequentially marked at 2 ft. intervals. Third party verified to ANSI/TIA-568-C.2, Category 6.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
6663U6 0101000	1,000 FT	27.000 LB	BLACK	C	4 PR #23 FRPO/FEP FLRST
6663U6 010500	500 FT	14.000 LB	BLACK		4 PR #23 FRPO/FEP FLRST

Notes:

C = CRATE REEL PUT-UP.

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