

## OSP6U Multi-Conductor - Category 6 Outside Plant Cable



For more Information  
please call

1-800-Belden1



### General Description:

CAT6 (250 MHz), 4 Pair, U/UTP-Unshielded, Outdoor OSP, Premise Horizontal Cable, 24 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Gel-Filled, Patented X-Spline, UV-Resistant LLDPE Jacket

### Usage (Overall)

**Suitable Applications:** Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, 350MHz Category 6, Outside Plant, Duct, OSP, Outside

### 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
PO - Polyolefin

#### Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PE - Polyethylene

Outer Jacket Diameter:

Nom. Dia. (in.)
0.251

#### Overall Cable

**Overall Cabling Fillers:** Pat

**Overall Cabling Separator Material:** Patented X-Spline

#### 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:** -40°C To +75°C

**Installation Temperature Range:** -20°C To +60°C

**Operating Temperature Range:** -40°C To +60°C

**Bulk Cable Weight:** 31 lbs/1000 ft.

**Max. Recommended Pulling Tension:** 35 lbs.

**Min. Bend Radius/Minor Axis:** 1 in.

**Min. Bend/Installation:** 2.510 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

EU Directive 2011/65/EU (ROHS II):	Yes
IEEE Specification:	POE per IEEE 802.3af & POE+ per IEEE 802.3at-2009
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	07/01/2005
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, ISO/IEC 11801:2011 Amendment 2.2 Class E
ANSI Specification:	ANSI/NEMA WC-66 and ANSI/ICEA S-116-732-2013 Category 6
Other Specification:	ANSI/ICEA S-56-434 Outdoor Use, ANSI/ICEA S-99-689 Broadband Outdoor Use, REA-PE200 Approved Jacket Material

#### Suitability

Suitability - Outdoor:	Yes
Suitability - Aerial:	Yes - Black only, when supported by messenger wire.
Suitability - Burial:	Yes
Sunlight Resistance:	Yes

#### Plenum/Non-Plenum

Plenum (Y/N):	No
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### Electrical Characteristics (Overall)

#### Nom. Mutual Capacitance:

Capacitance (pF/ft)  
15.700

Maximum Capacitance Unbalance (pF/100 m):	66
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#### Nominal Velocity of Propagation:

VP (%)  
65

#### Max. Delay Skew:

Delay Skew (ns/100 m)  
25

#### Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)  
8.9

#### 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)
0.772	1.800	76	75	74.2	72.2	
1	2.000	74.3	73.3	72.3	70.3	20.000
4	3.800	65.3	64.3	61.5	59.5	23.000
8	5.300	60.8	59.8	55.5	53.4	24.500
10	6.000	59.3	58.3	53.4	51.4	25.000
16	7.600	56.3	55.2	48.7	46.7	25.000
20	8.500	54.8	53.8	46.4	44.3	25.000
25	9.500	53.3	52.3	43.9	41.8	24.300
31.25	10.700	51.9	50.9	41.3	39.2	23.600
62.5	15.400	47.4	46.4	32.1	30.0	21.500
100	19.800	44.3	43.3	24.6	22.5	20.100

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155	25.200	41.5	40.4	16.3	14.3	18.800
200	29.000	39.8	38.8	10.8	8.8	18.000
250	32.600	38.3	37.3	5.5	3.5	17.300

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	55.7	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	41.7	38.7
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	31.8	28.8
100	100 ± 15	100 ± 15	27.8	24.8
155	100 ± 18	100 ± 15	23.9	20.9
200	100 ± 18	100 ± 15	21.7	18.7
250	100 ± 22	100 ± 15	19.8	16.8

### Notes (Overall)

**Notes:** -40C Cold Bend Compliance Per UL1581, Reference T8-6-T8-6 for Burial, Print Includes Descending Footage / Meter Markings, Water Penetration per GR 421-CORE para. 4.3.5.1. and ANSI/ICEA S-107-704 Para. 8.2.1

### Reference (Overall)

Previous Part Number: 24564495

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
OSP6U 0101000	1,000 FT	30.000 LB	BLACK		CAT6 4PR U/UTP OSP REEL

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