


**Product:** [OSP6U](#) 

Category 6 OSP Cable, 4 Pair, U/UTP, Gel Filled



### Product Description

Category 6 Premise Horizontal Cable (350MHz), OSP Rated, 4-Pair, 24 AWG Solid Bare Copper Conductors, U/UTP, Gel-Filled, Polyethylene Jacket

### Technical Specifications

#### Product Overview

Suitable Applications:	OSP-Outside, Premise Horizontal Cable, Ethernet 1000BASE-T, Ethernet 100BASE-TX, Ethernet 10BASE-T, PoE++, PoE+, PoE, Noisy Environments
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#### Construction Details

##### Conductor

AWG	Stranding	Material	Number of Pairs
24	Solid	BC - Bare Copper	4

##### Insulation

Material	Color Code
PO - Polyolefin	White/Blue Stripe & Blue, White/Orange Stripe & Orange, White/Green Stripe & Green, White/Brown Stripe & Brown
Bonded-Pair:	No
Waterblocking:	Gel Filled

##### Outer Jacket Material

Separator Material	Material	Nom. Diameter	Ripcord
Center Member (Patented X-Spline®)	PE - Polyethylene	0.251 in	Yes

#### Electrical Characteristics

##### Electricals

Max. Conductor DCR	Max. DCR Unbalance	Max. DCR Unbalanced Between Pairs [%]	Max. Capacitance Unbalance	Nom. Mutual Capacitance
93.8 Ohm/km	3%	5%	160 pF/100m	15.7 pF/ft

##### Delay

Frequency [MHz]	Max. Delay	Max. Delay Skew	Nom. Velocity of Propagation (VP) [%]
100 MHz	537.6 ns/100m	45 ns/100m	65%

##### High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [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	2.0 dB/100m	74.3 dB	72.3 dB	70.3 dB	67.8 dB	64.8 dB	20.0 dB	100 ± 15 Ohm	100 ± 15 Ohm	40.0 dB	35.0 dB
4 MHz	3.8 dB/100m	65.3 dB	63.3 dB	59.5 dB	55.7 dB	52.7 dB	23.0 dB	100 ± 15 Ohm	100 ± 15 Ohm	40.0 dB	23.0 dB
8 MHz	5.3 dB/100m	60.8 dB	58.8 dB	53.4 dB	49.7 dB	46.7 dB	24.5 dB	100 ± 15 Ohm	100 ± 15 Ohm	40.0 dB	16.9 dB
10 MHz	6.0 dB/100m	59.3 dB	57.3 dB	51.4 dB	47.8 dB	44.8 dB	25.0 dB	100 ± 15 Ohm	100 ± 15 Ohm	40.0 dB	15.0 dB
16 MHz	7.6 dB/100m	56.3 dB	54.3 dB	46.7 dB	43.7 dB	40.7 dB	25.0 dB	100 ± 15 Ohm	100 ± 15 Ohm	38.0 dB	10.9 dB
20 MHz	8.5 dB/100m	54.8 dB	52.8 dB	44.3 dB	41.7 dB	38.7 dB	25.0 dB	100 ± 15 Ohm	100 ± 15 Ohm	37.0 dB	9.0 dB
25 MHz	9.5 dB/100m	53.3 dB	51.3 dB	41.8 dB	39.8 dB	36.8 dB	24.3 dB	100 ± 15 Ohm	100 ± 15 Ohm	36.0 dB	7.0 dB
31.25 MHz	10.7 dB/100m	51.9 dB	49.9 dB	39.2 dB	37.9 dB	34.9 dB	23.6 dB	100 ± 15 Ohm	100 ± 15 Ohm	35.1 dB	5.1 dB

62.5 MHz	15.4 dB/100m	47.4 dB	45.4 dB	30.0 dB	31.8 dB	28.8 dB	21.5 dB	100 ± 15 Ohm	100 ± 15 Ohm	32.0 dB	
100 MHz	19.8 dB/100m	44.3 dB	42.3 dB	22.5 dB	27.8 dB	24.8 dB	20.1 dB	100 ± 15 Ohm	100 ± 15 Ohm	30.0 dB	
155 MHz	25.2 dB/100m	41.5 dB	39.5 dB	14.3 dB	23.9 dB	20.9 dB	18.8 dB	100 ± 22 Ohm	100 ± 15 Ohm	28.1 dB	
200 MHz	29.0 dB/100m	39.8 dB	37.8 dB	8.8 dB	21.7 dB	18.7 dB	18.0 dB	100 ± 22 Ohm	100 ± 15 Ohm	27.0 dB	
250 MHz	32.8 dB/100m	38.3 dB	36.3 dB	3.5 dB	19.8 dB	16.8 dB	17.3 dB	100 ± 32 Ohm	100 ± 15 Ohm	26.0 dB	

## Voltage

Non-UL Voltage Rating
300 V

## Mechanical Characteristics

### Temperature

Operating	Installation	Storage
-40°C To +75°C	-40°C To +60°C	-40°C To +75°C

### Bend Radius

Stationary Min.	Installation Min.
1.0 in	2.5 in

Max. Pull Tension: 25 lbs

Bulk Cable Weight: 25 lbs/1000ft

## Standards and Compliance

Environmental Suitability:	Outdoor, Outdoor, Sunlight Resistance
Sustainability:	Product Lens™, Environmental Product Declaration (EPD) Available
ICEA Compliance:	S-116-732-2013
ICEA Compliance:	S-56-434
ICEA Compliance:	S-99-689
ICEA Compliance:	S-100-685
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3
NEMA Compliance:	ANSI/NEMA WC-66
Data Category:	Category 6
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 6
CENELEC Compliance:	Segregation class according EN50174-2=a
European Directive Compliance:	EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16
APAC Compliance:	China RoHS II (GB/T 26572-2011)

## Part Number

### Variants

Item #	Color	Putup Type	Length	UPC
OSP6U 0101000	Black	Reel	1,000 ft	612825295235
OSP6U 0101000	Black	Reel	1,000 ft	612825295235

## Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0. Suitable for Use in Buildings in Wet Locations. Not Suitable for Direct Burial. Fully Water Blocked and Sunlight Resistant (Black Jacket Only). Belden recommends using an entrance demarcation point when transitioning inside buildings with gel-filled OSP cables due to the cable design containing gel specific for wet outdoor environments. The suggested transition point is the REVConnect core coupler, part number RVACPKUBK-S1.
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## History

Update and Revision:	Revision Number: 0.419 Revision Date: 03-16-2021
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