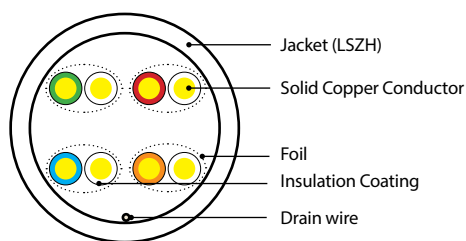
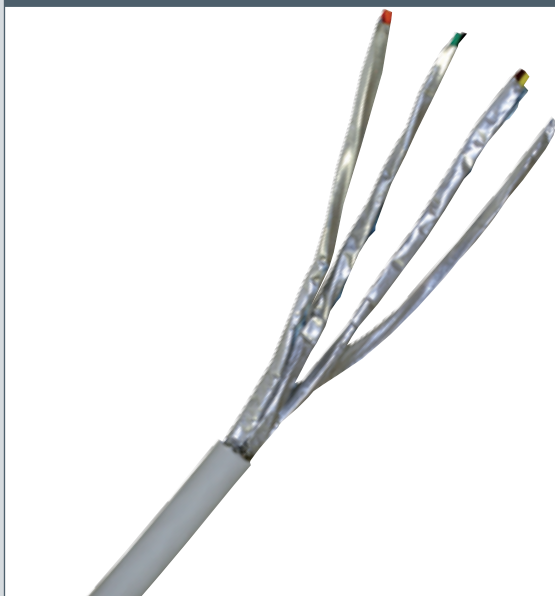


## Category 6<sub>A</sub> U/FTP Low Smoke Zero Halogen Cable



OptronicsPlus category 6<sub>A</sub> U/FTP LSZH cable is designed to deliver robust standards based performance ensuring optimum bandwidth for today's high speed network applications. The cable is designed to support horizontal networking applications over distances up to 100 metres.

Our category 6<sub>A</sub> U/FTP LSZH cable exceeds the minimum specified performance for category 6<sub>A</sub> U/FTP cables and support all class EA applications as defined within ISO/IEC 11801 (2<sup>nd</sup> Edition): 2010 such as 100GBASE-T (Gigabit Ethernet), 2G FCBASE-T, 4G FCBASE-T and 1000BASE-T (Gigabit Ethernet).

### Applicable Standards

The category 6<sub>A</sub> U/FTP LSZH cable is manufactured and tested directly in accordance with the major industry standards:

- > ISO/IEC 11801 2<sup>nd</sup> Edition
- > ANSI/TIA 568-C.2
- > EN 50173
- > IEC 61156-5
- > EN 50288-3-1

### Fire Performance

Category 6<sub>A</sub> U/FTP LSZH cables exceed the requirements of:

- > IEC 60332-1-2
- > IEC 60754-2
- > IEC 61034

### Other Relevant Information

- > REACH / SvHC Compliant regulation (EC) No. 1907/2006
- > Pair colour code:
  - Pair 1: Orange and White/Orange
  - Pair 2: Blue and White/Blue
  - Pair 3: Brown and White/Brown
  - Pair 4: Green and White/Green

## Category 6<sub>A</sub> U/FTP Low Smoke Zero Halogen Cable

### Technical Specifications

CONSTRUCTION	
Conductors	A single strand of 23AWG (0.574mm) solid copper
Insulation	Expanded Polyethylene
Cable	8 insulated wires formed into 4 pairs. Each pair is individually screened with an aluminised polyester tape. (The aluminium side of the tape is in continuous contact with the tinned copper drain wire)
Screen	An aluminised polyester tape screen applied with a 15% minimum overlap (The aluminium side is in continuous contact with the tinned copper drain wire.)
Sheath	A uniform layer of violet coloured low smoke zero halogen (LSZH) compound (RAL 4005)
Diameter	7.2mm

ELECTRICAL PROPERTIES AT 20°C		
Characteristic Impedance	(1-100MHz) (100 - 250MHz)	100 ± 15Ω 100 ± 18Ω
DC Loop Resistance		≤ 19.0Ω/100m
Resistance Unbalance		≤ 2%
Capacitance Unbalance to Earth		≤ 1600 pF/km
Delay Skew		≤ 40ns/100m @ 100MHz
Nominal Velocity of Propagation		78%
Propagation Delay (Nominal)		≤ 534ns/100m
Test Voltage (d.c. for 1 minute) Conductor /Conductor		1000V
Insulation Resistance (500V d.c)		≥ 500MΩ.km
Transfer Impedance		≥ 55dB

### Mechanical Characteristics

TEMPERATURE RANGE	
Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C

MINIMUM BEND RADII	
Installation	8 x cable diameter
Installed	4 x cable diameter

MAXIMUM TENSILE FORCE	
During Installation	100N

### Transmission line performance at 20°C

FREQUENCY MHZ	ATTENUATION dB/100M	NEXT MIN dB	ACR MIN dB	PSNEXT MIN dB	ELFEXT MIN dB	PSELFEXT MIN dB	PSANEXT MIN dB	RETURN LOSS
1	1.8	95.	93.2	95.0	68.0	65.0	-	-
4	3.8	66.3	62.5	66.3	58.0	55.0	76.5	23
10	5.9	60.3	54.4	60.3	50.0	47.0	72.5	25
20	8.4	55.8	47.4	55.8	44.0	41.0	69.5	25
62.5	15.0	48.4	33.4	48.4	34.1	31.1	64.5	21.5
100	19.1	45.3	26.2	45.3	30.0	27.0	62.5	20.1
250	31.1	39.3	8.2	39.3	22.0	19.0	56.5	17.3
500	45.3	34.8	-10.5	34.8	16.0	13.0	52.0	17.3

### Ordering Information

DESCRIPTION	PART NUMBER
Category 6 <sub>A</sub> U/FTP LSZH 500m Reel	UFTP6A500LSZH