



STRUCTURED  
CABLING PARTNER

## Category 6 U/FTP 4 Pair Cable

**OPTIPLUS Category 6 U/FTP (Foil Twisted Pair) 4 Pair** 23AWG cables are suitable for risky environment, where cabling systems installed in a critical manner such as in small and large scale industries, hospitals etc. Optiplus U/FTP cables provide extra protection from external noise sources with excellent quality performance. It is capable of carrying high bit-rate signaling for extended distances in backbone & horizontal applications.





### Standards

- ANSI/TIA-568-C.2
- TIA/EIA 568-B.2-1
- ISO/IEC 11801
- ISO/IEC 61156-5
- EN 50288-1
- IEEE /802.af, IEEE 802.3at for PoE applications

### Key Features:

- Tested up to 250MHz.
- High ACR values-providing low BER (Bit Error-Rate).
- Exceeds Cat 6 performance.
- Extremely high pair-balance-providing excellent EMC (Electromagnetic compatibility).
- Maximum noise immunity and minimum radiations.
- UL94V-0 rated plastic.
- Standard packing will be 305 meter easy pull out box.

### Colour Code:

Pair 1	Pair 2	Pair 3	Pair 4
			
Orange White – Orange	Green White – Green	Blue White – Blue	Brown White - Brown

### Cable Construction:

Conductor Material	23AWG Solid Bare Copper
Conductor Construction	Solid
Conductor Diameter	0.56mm
Insulation Material	HDPE ( HIGH DENSITY POLY ETHYLENE)
Insulation Diameter (approx.mm)	1.34± 0.05mm
Foil	Individual pair wrapped with aluminium tape
Pairs Count	4 nos
Jacket Thickness (mm)	0.60mm ± 0.05mm
Jacket Material	PVC/LSZH
Jacket Colour	White, Gray, Blue & Orange
Measurement Marking	Yes



## Electrical and Mechanical Characteristics:

- Impedance –  $100\ \Omega \pm 15\%$
- Frequency - 1 MHz to 250 MHz
- DC Resistance -  $73\ \Omega/100\text{m}$
- Capacitance -  $5.6\text{nF}/100\text{m}$
- Propagation Delay Skew -  $35\ \text{nsec}/100\text{m}$
- Bend Radius -  $69.3\text{mm}$  (min)
- Insulation Resistance -  $500\ \text{M}\Omega.\text{km}$  (min)
- Dielectric Strength -  $1.0\text{kV}$  dc or  $0.7\text{kV}$  ac for 1 min
- Operating Temperature –  $-20^{\circ}\text{C}$  to  $75^{\circ}\text{C}$
- Storage Temperature –  $0^{\circ}\text{C}$  to  $80^{\circ}\text{C}$

## Transmission Characteristics:

Freq. (MHz)	Attenuation (dB) max.	NEXT (dB) min.	PS NEXT (dB) min.	ELFEXT (dB) min.	PSELFEXT (dB) min.	Return Loss (dB) min.
1	2.0	66.0	64.0	66.0	64.0	20.0
4	3.8	65.3	63.3	58.0	55.0	23.0
10	6.0	59.3	57.3	50.0	47.0	25.0
20	8.5	54.6	52.8	44.0	41.0	25.0
31.25	10.7	51.9	49.9	40.1	37.1	23.6
100	19.9	44.3	42.3	30.0	27.0	20.0
200	29.1	39.8	37.8	24.0	21.0	18.0
250	33.0	38.3	36.3	22.0	19.0	17.3

## Ordering Information:

PART NUMBER	DESCRIPTION	LENGTH
OP-C6110223/PVC	Category 6 U/FTP 4 Pair Cable PVC	305 mtr
OP-C6110223/LSZH	Category 6 U/FTP 4 Pair Cable LSZH	305 mtr



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