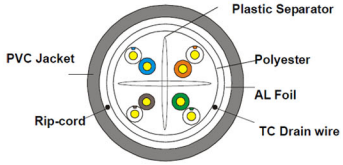
OPTiLite Copper Cable

CAT6 F/UTP 4Pairs PVC/LSZH Cable



FEATURES

- 23 AWG conductor - solid bare copper cable
- PVC, LSZH and PE options
- Supplied in 305m boxes or 500 reels
- Printed metre marks

DIAGRAM & DESCRIPTION

OPTiLite Category 6 Foiled Twisted Pair (FTP) cable is produced using 4x2x23 AWG copper to a class E standard. An aluminium tape is used to shield all 4 pairs; this gives a screened protection against external interference such as EMI. Capable of supporting protocol's up to 250 MHz for horizontal and backbone installations.

Sheath Printing	It will be printed as customer's requirement with batch produce.			
Category	FTP/CAT6-4P-PVC/LSZH			
Test Standard	ISO/IEC11801, TIA/EIA 568B, EN 50173, YD/T1019-2001			
Conductor	Material	SOLID-Bare Copper		
	Nom.O.D.(mm)	0.565	up	+0.005
			down	-0.005
Insulation	Material	HDPE		
	Diameter	1.08 ± 0.02 mm		
Separator	Plastic Separator	Drain wire		0.45mmTC
Shielded	AL Foil			
Sheath	Thickness	0.60 ± 0.05 mm		
	External O.D.	7.4±0.4 mm		
	Surface	Clean, Frap, Satiation		
	Material	PVC/LSZH		
	Color	Multiple		
Surface Printing	Letter height	3.0±0.3mm		
	Color	Black		
	Print error & Space	≤±0.5%, 1m		
Core Color	Blue, White-Blue		Orange, White-Orange	
	Green, White-Green		Brown, White-Brown	
Packing	Plywood drum, pallet			
Carton Dimension	37*25*16cm			
Packing length	305±1.5m			
Rip-cord	Yes			

Sheath Physical Properties (C1038)	Before Aging Tensile Strength (Mpa) ≥13.5 Elongation (%) ≥150	Sheath Physical Properties (C1238)	Before Aging Tensile Strength (Mpa) ≥10.0 Elongation (%) ≥125
	Aging Period (°C×hrs) 100°C×24h×7d		Aging Period (°C×hrs) 100°C×24h×7d
	After Aging Tensile Strength (Mpa) ≥12.5 Elongation (%) ≥125		After Aging Tensile Strength (Mpa) ≥8 Elongation (%) ≥100
	Cold bend (-20±2°C×4h), No visible cracks		Cold bend (-20±2°C×4h), No visible cracks
Electrical Characteristics (20°C)			1.0-250.0MHz, Characteristic impedance (Ω) 100±15
			1.0-250.0MHz, Delay Shew 20 °C(ns/100m) ≤ 45
			Capacitance unbalance to earth (pf/100m) max 330
			DC Resistance 20 °C (Ω/100m) max 9.5
			DC Conductor Resistance Unbalance (%)max 5.0

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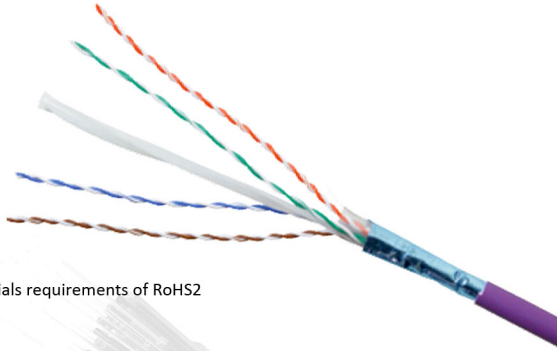
TRANSMISSION PERFORMANCE (20°C, 100M)

Frequency (MHz)	Attenuation (dB/100m)	ReturnLoss (dB)	Next (dB)	PS-NEXT (dB)	ELFEXT	PS-ELFEXT (dB/100m)	Propagation Delay (ns/100m)
1.0	1.9	20.0	74.0	72.3	68.0	65.0	570.0
4.0	3.7	23.0	65.0	63.3	56.0	53.0	552.0
8.0	5.3	24.5	60.7	48.8	49.9	46.9	546.73
10.0	5.9	25.0	59.0	57.3	48.0	45.0	545.38
16.0	7.5	25.0	56.0	54.2	43.9	40.9	543.0
20.0	8.4	25.0	55.0	52.8	42.0	39.0	542.05
25.0	9.5	24.3	53.3	41.3	40.0	37.0	541.2
31.25	10.6	23.6	52.0	49.9	38.1	35.1	540.44
62.5	15.4	21.5	47.0	45.4	32.1	29.1	538.55
100.0	19.8	20.1	44.0	42.3	28.0	25.0	537.6
200.0	29.0	18.0	40.0	37.8	22.0	19.0	536.54
250.0	32.8	17.3	38.0	36.3	20.0	17.0	536.27

Applications

- Supports category 6 (class E) networks running up to 250 MHz applications
- Backwards compatible with category 5e distribution systems
- Horizontal and backbone installations
- 10 Base T (IEEE 802.3)
- 100 Base T (IEEE 802.3U)
- 1000 Base T (IEEE 802.3ab)
- 100 VG any LAN (IEEE 802.12)
- Token ring (IEEE 805.5)



Conformance

- Category 6
- ANSI/EIA/TIA 568B.2 : 2002
- ISO/IEC 11801 : 2002
- This product conforms to the materials requirements of RoHS2
- REACH
- ETL/UL approved

System Warranty:

The OPTiLite Cabling System Warranty provides a 25-year product and applications assurance of compliance with the industry performance standard appropriate to the class of cabling installed. The warranty may be applied for by an accredited OPTiLite Partner who has designed, supplied and installed the said system.