

## U6-C0424-IG

### Description

Osilan's Cat6 cable solutions are flexible and cost-effective solutions that fully comply with category 6/ Class E standards. Cat6 cables are available in U/UTP, F/UTP, SF/UTP shielded cable and with PVC or LSZH sheath, ideal for most of today's LAN network requirements and specifications with designs that support 350 MHz applications.

### Features

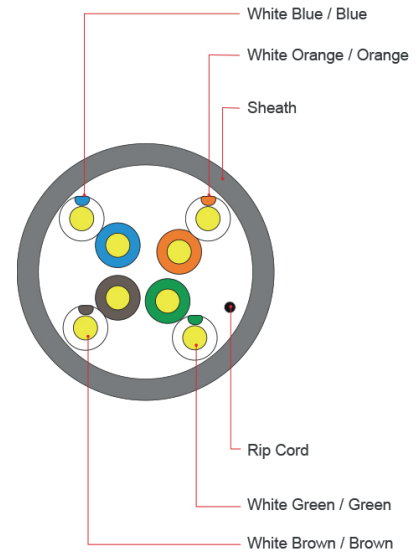
- Category 6 U/UTP copper cable with channel characterized to 350 MHz
- 4 Pairs, 24 AWG solid copper conductors insulated with PE
- Supports IEEE 802.bt type 3,4 & PoE++ Standards
- PVC Sheath.
- 25-years system warranty

### Application

- Suitable for all category 6 backbone and horizontal Cabling applications.
- 10 Base-T (Ethernet), 100 Base-T (Fast Ethernet), 1000 Base-T (Gigabit Ethernet).
- 155Mb/s ATM, 622Mb/s ATM, 1.2Gb/s ATM, Token Ring 4/16 & ISDN.

### Standards

- ANSI/TIA-568-C.2 Category 6
- EN 50173-1
- ISO 11801 2<sup>nd</sup> Edition
- EN 50288-6-1



#### Technical Specifications

Tensile Strength	Min. 5MPa
Cable Outer Diameter	5.8mm(+/-0.4mm)
Insulation	HDPE, Thickness 0.22mm(Nominal)
Cable Weight	13.6 Kg/Km (Nominal )
Temperature (Installation)	0°C to +60°C
Temperature (Operation)	-20°C to +75°C

#### Mechanical and Electrical Specification

Bend radius Installation	46.4mm
DC resistance	Max. 9.5 Ω/100m at 20° C
Insulation resistance	Min. 5000 MΩ/Km at 20° C
Mutual capacitance Nom	5.2 nf/100 m at 1kHz
Capacitance unbalance	(pair to ground) Max. 160 pF/100 m at 1kHz
Characteristic impedance	(1 - 100MHz) (100 ± 15) Ω
Nominal velocity of propagation	69%
Dielectric Test voltage	(DC, 1 min.) 1 kV/1 min.
Delay Skew	45 ns/100 m (Max.)

Frequency (MHz)	RL ≥ dB	ATT(20°C) ≤ dB	NEXT ≥ dB	PHASE DELAY ≤ ns
1	20.0	-	74.3	570.00
4.0	23.0	3.8	65.3	552.00
8.0	24.5	5.32	60.8	546.73
10.0	25.0	5.95	59.3	545.38
16.0	25.0	7.55	56.2	543.00
20.0	25.0	8.47	54.8	542.05
25.0	24.3	9.51	53.3	541.20
31.25	23.6	10.67	51.9	540.44
62.5	21.5	15.38	47.7	538.55
100	20.1	19.80	44.3	537.60
200	18.0	28.98	39.8	536.54
250	17.3	32.85	38.3	536.27

Frequency (MHz)	PSNEXT ≥ dB	ELFEXT ≥ dB	PSELFEXT ≥ dB
1	72.3	67.8	64.8
4.0	63.3	55.8	52.8
8.0	58.8	49.7	46.7
10.0	57.3	47.8	44.8
16.0	54.2	43.7	40.7
20.0	52.8	41.8	38.8
25.0	51.3	39.8	36.8
31.25	49.9	37.9	34.9
62.5	45.1	31.9	28.9
100	42.3	27.8	24.8
200	37.8	21.8	18.8
250	36.3	19.8	16.8

#### ORDERING INFORMATION

Part No.	Description	Packing
U6-C0424-IG	Category 6 U/UTP Cables, 4Pairs, 24AWG Solid Copper, PVC Sheath, Colour International Grey	305m Box

\* More colours are available.