



OptronicsLITE Category 6 U/UTP - Unshielded Twisted Pair PVC Cable

The OptronicsLITE Category 6 Unshielded Twisted Pair (U/UTP) PVC cable with 4 x 2 x 24 AWG copper wire structure fully complies with ISO/IEC 11801 and TIA/EIA 568 standards. They ensure optimum bandwidth for today's high speed network applications and are designed to deliver a robust standard based performance. OptronicsLITE Cat6 U/UTP cable exceeds Cat6/Class E performance requirements and supports 10-BASE-T, 100-BASE-TX and 1000Base-T applications. It is available with PVC outer jacket.

Features

- 24 AWG conductors
- Exceeds Cat6 performance requirements
- ISO/IEC 11801 and TIA/EIA568 compliant
- Available with PVC outer jacket
- Supplied in 305m boxes or 500m reels
- Printed metre marks

Applications

- Cat6/Class E up to 250Mhz applications
- 10BASE-T, 100BASE-TX, 1000Base-T applications
- Horizontal network installations
- Backwards compatible with Category 5e distribution systems

Specifications

CONSTRUCTION

Conductor	24 AWG solid bare copper
Conductor Nom. O.D	0.520 ± 0.005 mm
Insulation	HDPE
Insulation Nom. O.D	0.94 ± 0.05 mm
Minimum Thickness	0.21 mm (REF)
Central Element O.D	4.8 (REF)+CROSS
Outer Sheath	PVC
Average Thickness	0.50 ± 0.05 mm
Overall Diameter	5.8 ± 0.20mm
Colour	Optional
Sheath Normal Temp Tensile Strength	≥13.5
Sheath Normal Temp Elongation	≥150
Insulation Normal Temp Tensile Strength	≥16
Insulation Normal Temp Elongation	≥300
Aging Condition	100°C±2°C, 24h, 7d
Sheath After Aging Tensile Strength	≥12.5
Sheath After Aging Elongation	≥125
Temperature Rating	-20°C– + 75°C
Cold Bend (-20±2°C×4)	8× Cable O.D. No visible cracks
DC Resistance (maximum)	9.38 ohms/100 m
Maximum Operating Voltage	80V

Transmission Line Performance

FREQUENC MHz	RL ≥dB	ATT ≤dB	NEXT ≥dB	ACRF ≥dB	PS NEXT dB	PS ACRF dB	Delay ns
1.00	19.1	3.0	65.0	64.2	62.0	61.2	521
4.00	21.0	3.5	64.1	52.1	61.8	49.1	504
8.00	21.0	5.0	59.4	46.1	57.0	43.1	500
10.00	21.0	5.5	57.8	44.2	55.5	41.2	498
16.00	20.0	7.0	54.6	40.1	52.2	37.1	496
20.00	19.5	7.9	53.1	38.2	50.7	35.2	495
25.00	19.0	8.9	51.5	36.2	49.1	33.2	495
31.25	18.5	10.0	50.0	34.3	47.5	31.3	494
62.50	16.0	14.4	45.1	28.3	42.7	25.3	492
100.00	14.0	18.6	41.8	24.2	39.3	21.2	491
200.00	11.0	27.4	36.9	18.2	34.3	15.2	490
250.00	10.0	31.1	35.3	16.2	32.7	13.2	490

Standards Compliance

The CAT6 U/UTP PVC cable is manufactured and tested directly in accordance with the major industry standards:

- Class E / Category 6
- ANSI/TIA/EIA-568-C.2
- ISO/IEC 11801 2nd Edition
- EN 50173
- IEC 61156-5
- EN 50288-3-1
- IEC 60332-1-2
- RoHS
- REACH / SvHC

Ordering Information

DESCRIPTION	PART NUMBER
OptronicsLITE CAT6 U/UTP 24 AWG PVC Cable Grey - 305m box	OCC-6-12-305-L
OptronicsLITE CAT6 U/UTP 24 AWG PVC Cable Grey - 500m reel	OCC-6-12-500-L
OptronicsLITE CAT6 U/UTP 24 AWG PVC Cable Blue - 305m box	OCC-6-12-305-2-L
OptronicsLITE CAT6 U/UTP 24 AWG PVC Cable Blue - 500m reel	OCC-6-12-500-2-L
OptronicsLITE CAT6 U/UTP 24 AWG PVC Cable Yellow - 305m box	OCC-6-12-305-3-L
OptronicsLITE CAT6 U/UTP 24 AWG PVC Cable Yellow - 500m reel	OCC-6-12-500-3-L
OptronicsLITE CAT6 U/UTP 24 AWG PVC Cable Green - 305m box	OCC-6-12-305-4-L
OptronicsLITE CAT6 U/UTP 24 AWG PVC Cable Green - 500m reel	OCC-6-12-500-4-L
OptronicsLITE CAT6 U/UTP 24 AWG PVC Cable Red - 305m box	OCC-6-12-305-5-L
OptronicsLITE CAT6 U/UTP 24 AWG PVC Cable Red - 500m reel	OCC-6-12-500-5-L
OptronicsLITE CAT6 U/UTP 24 AWG PVC Cable White - 305m box	OCC-6-12-305-7-L
OptronicsLITE CAT6 U/UTP 24 AWG PVC Cable White - 500m reel	OCC-6-12-500-7-L
OptronicsLITE CAT6 U/UTP 24 AWG PVC Cable Orange - 305m box	OCC-6-12-305-8-L
OptronicsLITE CAT6 U/UTP 24 AWG PVC Cable Orange - 500m reel	OCC-6-12-500-8-L

Additional Images

