



Category 6 U/UTP - Unshielded Twisted Pair PE Cable

The Category 6 Unshielded Twisted Pair (U/UTP) PE cable with 4 x 2 x 23 AWG copper wire structure fully complies with ISO/IEC 11801 and TIA/EIA 568 standards. OptronicsPlus 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 PE jacket.

Features

- 23 AWG conductors
- Exceeds Cat6 performance requirements
- ISO/IEC 11801 and TIA/EIA568 compliant
- Available with PE 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	23AWG; Solid bare Copper
Conductor Nom. O.D	0.55 ± 0.005 mm
Insulation	HDPE
Insulation Nom. O.D	1.00 ± 0.05 mm
Central Element O.D	4.8 (REF)+CROSS
Rip Cord	Yes
Outer Sheath	PE
Overall Diameter	6.0 ± 0.30 mm
Thickness	0.55 ± 0.05 mm
Colour	Optional
Conductor resistance	$\leq 9.38 \Omega/100m$
Resistance unbalance within a pair	$\leq 2.0 \%$
Resistance unbalance between pairs	$\leq 4.0 \%$
Insulation resistance	$\geq 5000 M\Omega km$
Mutual capacitance	$\leq 5.6 nF/100m$
Minimum Elongation at Break of the Sheath	$\geq 300\%$
Minimum Tensile Strength of Sheath	≥ 10 MPa
Storage Temperature Range	-15°C to +70°C
Installation Temperature Range	0°C to +50°C
Cold Bend (-20±2°C ×4)	8×Cable O.D. No visible cracks

Transmission Line Performance

FREQUENCY (MHz)	RETURN LOSS ≥dB	ATT ≤dB	NEXT ≥dB	ACRF ≥DB	PS NEXT DB	PS ACRF DB
4	23.0	3.8	65.3	55.8	63.3	52.8
8	24.5	5.3	60.8	49.7	58.8	46.7
10	25.0	6.0	59.3	47.8	57.3	44.8
16	25.0	7.6	56.2	43.7	54.2	40.7
20	25.0	8.5	54.8	41.8	52.8	38.8
25	24.3	9.5	53.3	39.8	51.3	36.8
31.25	23.6	10.7	51.9	37.9	49.9	34.9
62.5	21.5	15.4	47.4	31.9	45.4	28.9
100	20.1	19.8	44.3	27.8	42.3	24.8
200	18.0	29.0	39.8	21.8	37.8	18.8
250	17.3	32.8	38.3	19.8	36.3	16.8

Standards Compliance

The CAT6 U/UTP PE 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
- RoHS
- REACH / SvHC

Ordering Information

DESCRIPTION	PART NUMBER
CAT6 U/UTP 23 AWG PE Cable Black - 305m box	OCC-6-13-305
CAT6 U/UTP 23 AWG PE Cable Black - 500m reel	OCC-6-13-500

Additional Images

