



## Category 6 U/FTP - Unshielded Foiled Twisted Pair PE Cable

The Category 6 Unshielded Foiled Twisted Pair (U/FTP) cable with 4 x 2 x 23 AWG copper wire structure fully complies with ISO/IEC and TIA/EIA 568 standards. It is designed for use in horizontal network installations up to 250MHz. OptronicsPlus Cat6 U/FTP cable exceeds Cat6/Class E performance requirements and supports 10-BASE-T, 100-BASE-TX and 1000Base-T applications. It is available with a PE outer 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 (0.570 ±0.01 mm)
Insulation	
Material	FOPE
Nom. OD.	1.36±0.1 mm
Minimum Thickness	0.39mm
Outside-Tape Wrap Material	AL-MYLAR
Drain Wire	
Material	Tinned Solid Copper
Nom. OD.	1/0.404±0.008
Sheath	PE
Average Thickness	0.55 ±0.05 mm
Diameter	7.60mm ± 0.35mm
Colour	Optional
Sheath Normal Temp Tensile Strength (Mpa)	≥14
Sheath Normal Temp Elongation (%)	≥600
Insulation Normal Temp Tensile Strength (Mpa)	≥10
Insulation Normal Temp Elongation (%)	≥200
Aging Condition (°C×Hrs)	100°C±2°C, 24h, 7d
Sheath After Aging Tensile Strength (Mpa)	≥10.0
Sheath After Aging Elongation (%)	≥400
Temperature Rating (°C)	-20°C- + 75°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	3.7	78.0	78.0	75.0	75.0
8	24.5	5.2	78.0	77.2	75.0	74.2
10	25.0	5.9	78.0	75.3	75.0	72.3
16	25.0	7.4	78.0	71.2	75.0	68.2
20	25.0	8.3	78.0	69.3	75.0	66.3
25	24.3	9.3	78.0	67.3	75.0	64.3
31.25	23.6	10.4	78.0	65.4	75.0	62.4
62.5	21.5	14.9	75.5	59.4	75.0	56.4
100	20.1	19.0	72.4	55.3	72.5	52.3
200	18.0	27.5	67.9	49.3	69.4	46.3
250	17.3	31.0	66.4	47.3	64.9	44.3

## Standards Compliance

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

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

## Ordering Information

DESCRIPTION	PART NUMBER
Category 6 U/FTP PE Cable Black - 305m Box	OCC-6-33-305
Category 6 U/FTP PE Cable Black - 500m Reel	OCC-6-33-500

## Additional Images

