



## Category 6 F/UTP - Foiled Unshielded Twisted Pair PE Cable

The Category 6 Foiled Unshielded Twisted Pair (F/UTP) cable with 4 x 2 x 23 AWG copper wire structure fully complies with ISO/IEC and TIA/EIA 568 standards. An aluminum tape is used to shield all 4 pairs and this gives a screened protection against external interference such as EMI. OptronicsPlus Cat6 F/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 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 or 500m reels
- Printed metre marks

### Applications

- Cat6/Class E up to 250Mhz applications
- 10BASE-T, 100BASE-TX, 1000Base-T applications
- Horizontal network installations
- Ideal for environments where heavy external interference can disrupt signal such as EMI
- Backwards compatible with Category 5e distribution systems

## Specifications

### CONSTRUCTION

Conductor	23AWG solid bare copper
Conductor Nom. O.D	0.560 ± 0.008 mm
Insulation	HDPE
Insulation Nom. O.D	1.10 ± 0.05 mm
Minimum Thickness	0.27 mm (REF)
Central Element O.D	6.0 (REF)+CROSS
Outside-Tape Wrap Material	MYLAR
Outside Tape Wrap Material	AL-MYLAR
Drain Wire	
Material	Tinned Strand Copper Conductor
Nominal O.D	1/0.400 ± 0.008 mm
Outer Sheath	PE
Average Thickness	0.55 ± 0.05 mm
Overall Diameter	7.40 ± 0.40mm
Colour	Optional
Sheath Normal Temp Tensile Strength	≥13.5
Sheath Normal Temp Elongation	≥135
Insulation Normal Temp Tensile Strength	≥16
Insulation Normal Temp Elongation	≥300
Aging Condition	100°C±2°C, 24h, 7d
Sheath After Aging Tensile Strength	≥10.0
Sheath After Aging Elongation	≥400
Temperature Rating	-20°C— + 75°C
Cold Bend (-20±2°C×4)	8×Cable O.D., No visible cracks

## Transmission Line Performance

FREQUENCY (MHZ)	RL ≥dB	ATT ≤dB	NEXT ≥dB	ACRF ≥dB	PS NEXT dB	PS ACRF dB
4	21.0	3.5	64.1	52.1	61.8	49.1
8	21.0	5.0	59.4	46.1	57.0	43.1
10	21.0	5.5	57.8	44.2	55.5	41.2
16	20.0	7.0	54.6	40.1	52.2	37.1
20	19.5	7.9	53.1	38.2	50.7	35.2
25	19.0	8.9	51.5	36.2	49.1	33.2
31.25	18.5	10.0	50.0	34.3	47.5	31.3
62.5	16.0	14.4	45.1	28.3	42.7	25.3
100	14.0	18.6	41.8	24.2	39.3	21.2
200	11.0	27.4	36.9	18.2	34.3	15.2
250	10.0	31.1	35.3	16.2	32.7	13.2

### Standards Compliance

The CAT6 F/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 2<sup>nd</sup> Edition
- EN 50173
- IEC 61156-5
- EN 50288-3-1
- RoHS
- REACH

## Ordering Information

	PART NUMBER
CAT6 F/UTP 23 AWG cable PE Black - 305m reel	OCC-6-23-305
CAT6 F/UTP 23 AWG cable PE Black - 500m reel	OCC-6-23-500

## Additional Images

