



## Category 6A U/UTP - Unshielded Twisted Pair PE Cable

The Category 6A Unshielded Twisted Pair (U/UTP) cable with 4 x 2 x 23 AWG copper wire structure fully complies with ISO/IEC 11801 and TIA/EIA 568 standards. OptronicsPlus Cat6a U/UTP cable exceeds Cat6A/Class EA performance requirements and supports 10G-BASE-T, 2G FCBASE-T, 4G FCBASE-T and 1000Base-T applications. It is available with PE outer jacket.

### Features

- 23 AWG conductors
- Exceeds Cat6A 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

- Cat6A/Class EA up to 500Mhz applications
- 1000Base-T, 2G FCBASE-T and 10G BASE-T applications
- Horizontal network installations
- Backwards compatible with Cat5e and Cat6 distribution systems

## Specifications

### CONSTRUCTION

|                                    |  |
|------------------------------------|--|
| Conductor                          | 23AWG solid bare copper (0.565 ± 0.005 mm) |
| Insulation                         |  |
| Material<br>Nom. OD.               | HDPE<br>1.02 ± 0.05 mm                     |
| Filler<br>Material<br>Construction | RIPCORD<br>3*250D                          |
| Sheath                             | PE   |
| Thickness                          | 0.70 ± 0.05 mm                             |
| Diameter                           | 7.0mm ± 0.3mm                              |
| Colour                             | Optional                                   |
| Rip Cord                           | Yes  |

### PHYSICAL CHARACTERISTICS

|   |                                  |
|---|----------------------------------|
| Sheath Normal Temp Tensile Strength (Mpa)     | ≥14                              |
| Sheath Normal Temp Elongation (%)             | ≥600                             |
| Insulation Normal Temp Tensile Strength (Mpa) | ≥16                              |
| Insulation Normal Temp Elongation (%)         | ≥300                             |
| Aging Condition (°C×Hrs)                      | 100°C ± 2°C, 24h, 7d             |
| Sheath After Aging Tensile Strength (Mpa)     | ≥9.8                             |
| Sheath After Aging Elongation (%)             | ≥420                             |
| Temperature Rating (°C)                       | -20°C to +75°C                   |
| Cold Bend ( -20 ± 2°C × 4)                    | 8 × Cable O.D. No visible cracks |

## Transmission Line Performance

| FREQUENCY<br>(MHZ) | RL<br>≥dB | ATT<br>≤dB | NEXT<br>≥dB | ACRF<br>≥dB | PS NEXT<br>dB | PS ACRF<br>dB |
|--------------------|-----------|------------|-------------|-------------|---------------|---------------|
| 4                  | 19.0      | 4.2        | 63.0        | 53.2        | 60.5          | 48.2          |
| 8                  | 19.0      | 5.8        | 58.2        | 45.2        | 55.6          | 42.2          |
| 10                 | 19.0      | 6.5        | 56.6        | 43.3        | 54.0          | 40.3          |
| 16                 | 18.0      | 8.2        | 53.2        | 39.2        | 50.6          | 36.2          |
| 20                 | 17.5      | 9.2        | 51.6        | 37.2        | 49.0          | 34.2          |
| 25                 | 17.0      | 10.2       | 50.0        | 35.3        | 47.3          | 32.3          |
| 31.25              | 16.5      | 11.5       | 48.4        | 33.4        | 45.7          | 30.4          |
| 62.5               | 14.0      | 16.4       | 43.4        | 27.3        | 40.6          | 24.3          |
| 100                | 12.0      | 20.9       | 39.9        | 23.3        | 37.1          | 20.3          |
| 200                | 9.0       | 30.1       | 34.8        | 17.2        | 31.9          | 14.2          |
| 250                | 8.0       | 33.9       | 33.1        | 15.3        | 30.2          | 12.3          |
| 300                | 6.6       | 40.6       | 30.3        | 12.5        | 27.3          | 9.4           |
| 400                | 6.0       | 46.5       | 27.3        | 10.2        | 24.4          | 7.2           |
| 500                | 6.0       | 49.3       | 26.1        | 9.3         | 23.2          | 6.3           |

## Standards Compliance

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

## Ordering Information

| DESCRIPTION                                   | PART NUMBER   |
|---|---------------|
| CAT6a U/UTP 23 AWG PE Cable Black - 305m box  | OCC-6A-13-305 |
| CAT6a U/UTP 23 AWG PE Cable Black - 500m reel | OCC-6A-13-500 |

## Additional Images

