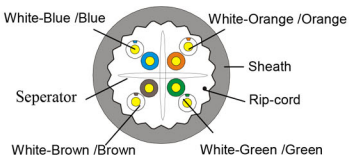


CAT6A U/UTP 4 Pairs Plenum (600MHz) Cable



- ### FEATURES
- U/UTP CAT6A-4P-PVC component compliant
 - Lightweight, Compact Round Design
 - Specified to 600MHz
 - Suitable for 10 Gigabit, Ethernet applications
 - Compact, but robust, design

DIAGRAM & DESCRIPTION

OPTiLite Category 6A cables, and associated connectors, take the performance capabilities of copper infrastructure to new levels. Designed to the current ISO EN and TIA standards for Class EA / Category 6A performance these products are intended to deliver reliable, high network performance over permanent link distances of up to 90 metres and channels up to 100m, including applications such as 10GBASE-T, 10 Gigabit Ethernet.

Category 6A/Class EA, cable is constructed of 23 AWG copper conductors with FEP Plenum (CMP), PVC Riser (CMR), HDPE Low Smoke Zero Halogen (LSZH), or PVC (CM) insulation. The copper conductors are twisted in pairs and separated by a crossdivider and a flame retardant jacket. The innovative cable design provides installation flexibility as cables can be routed in tight bundles through pathways and spaces.

| | | | | | | |
|-----------------------------------|--|---------------------------|--|----|--------|------|
| Sheath Printing | It will be printed as customer's requirement with batch produce. | | | | | |
| Category | U-UTP-CAT6A-4P-PVC-CMP | | | | | |
| Test Standard | ISO/IEC11801, ANSI/TIA-568-C.2, YD/T1019 | | | | | |
| Conductor | Material | SOLID-Bare Copper | | | | |
| | Nom.O.D.(mm) | 0.565 | <table border="1" style="display: inline-table;"> <tr> <td>up</td> <td>+0.005</td> </tr> <tr> <td>down</td> <td>-0.005</td> </tr> </table> | up | +0.005 | down |
| up | +0.005 | | | | | |
| down | -0.005 | | | | | |
| Insulation | Material | FEP | | | | |
| | Diameter | 0.99±0.04mm | | | | |
| Rip-cord | Yes | Drain wire | No | | | |
| | xxx | xxx | xxx | | | |
| Sheath | Thickness | 0.45±0.05 mm | | | | |
| | External O.D. | 6.1±0.4 mm | | | | |
| | Surface | Clean, Frap, Satiation | | | | |
| | Material | PVC (complies RoHS),CMP | | | | |
| | Color | According to the requires | | | | |
| Surface Printing | Letter height | 3.0±0.3mm | | | | |
| | Color | Black | | | | |
| | Print error & Space | ≤ ± 0.5%, 1m | | | | |
| Core Color | Blue, White-Blue | Orange, White-Orange | | | | |
| | Green, White-Gree | Brown, White-Brown | | | | |
| Packing | Drum | | | | | |
| Tray Dimension | According to the requires | | | | | |
| Packing length | 305±1.5m | | | | | |
| Filling | Plastic Separator: FEP | | | | | |
| Sheath Physical Properties | Before Aging Tensile Strength (Mpa) | ≥13.5 | | | | |
| | Elongation (%) | ≥150 | | | | |
| | Aging Period (°C×hrs) | 100°C×24h×7d | | | | |
| | After Aging Tensile Strength (Mpa) | ≥12.5 | | | | |
| | Elongation (%) | ≥125 | | | | |
| | Cold bend (-20±2°C×4h), No visible cracks | | | | | |
| Electrical Characteristics (20°C) | 1.0-500.0MHz, Characteristic impedance (Ω) 100±15 | | | | | |
| | 1.0-500.0MHz, Delay Skew 20°C(ns/100m) ≤45 | | | | | |
| | DC Resistance 20°C(Ω/100m) max 9.38 | | | | | |
| | DC Conductor Resistance Unbalance (%)max 5.0 | | | | | |
| | xxx | | | | | |

FLUKE TECHNICAL PERFORMANCE (80M)

| Frequency (MHz) | Attenuation (dB/100m) | ReturnLoss (dB) | Next (dB) | PS-NEXT (dB) | ELFEXT | PS-ELFEXT (dB/100m) | Propagation Delay (ns/100m) |
|-----------------|-----------------------|-----------------|-----------|--------------|--------|---------------------|-----------------------------|
| 1.0 | 3 | 19.1 | 65.0 | 62.0 | 64.2 | 61.2 | |
| 4.0 | 3.5 | 21.0 | 64.1 | 61.8 | 52.1 | 49.1 | |
| 8.0 | 5.0 | 21.0 | 59.4 | 57.0 | 46.1 | 43.1 | |
| 10.0 | 5.5 | 21.0 | 57.8 | 55.5 | 44.2 | 41.2 | |
| 16.0 | 7.0 | 20.0 | 54.6 | 52.2 | 40.1 | 37.1 | 498.0 |
| 20.0 | 7.9 | 19.5 | 53.1 | 50.7 | 38.2 | 35.2 | |
| 25.0 | 8.9 | 19.0 | 51.5 | 49.1 | 36.2 | 33.2 | |
| 31.25 | 10.0 | 18.5 | 50.0 | 47.5 | 34.3 | 31.3 | |
| 62.5 | 14.4 | 16.0 | 45.1 | 42.7 | 28.3 | 25.3 | |
| 100.0 | 18.6 | 14.0 | 41.8 | 39.3 | 24.2 | 21.2 | |
| 200.0 | 27.4 | 11.0 | 36.9 | 34.3 | 18.2 | 15.2 | |
| 250.0 | 31.1 | 10.0 | 35.3 | 32.7 | 16.2 | 13.2 | |
| 400.0 | 38.4 | 8.0 | 29.9 | 27.1 | 12.1 | 9.1 | |
| 500.0 | 43.8 | 8.0 | 26.7 | 23.8 | 10.2 | 7.2 | |
| *600.0 | 48.7 | 8.0 | 24.0 | 21.0 | 8.6 | 5.6 | |

Applicable Standards

The category 6A U/UTP cable is manufactured and tested directly in accordance with the major industry standards:

- ISO/IEC 11801 2nd Edition
- ANSI/TIA 568-C.2
- EN 50173
- IEC 61156-5
- EN 50288-3-1

Fire Performance

Category 6A U/UTP cables exceed the requirements of:

- IEC 60332-1-2
- IEC 60754-2
- IEC 61034



System Warranty:

The OPTiLite Cabling System Warranty provides a 25-year product and applications assurance of compliance with the industry performance standard appropriate to the class of cabling installed. The warranty may be applied for by an accredited OPTiLite Partner who has designed, supplied and installed the said system.

