

# Cat6 UTP Patch Cables

Ideal for 1/10GBase-T Copper Cabling Solution



## Overview

Cat6 network patch cable is the cost-effective solution for data center and SMB applications. Design for computer, hubs, switches, routers, DSL/cable modems and patch panel in Gigabit datacenter application. Compliant with ANSI/TIA-568.2-D and ISO/IEC 11801 standards, it ensures peak performance through your LAN.

## Application

- Rated for any 1/10GBase-T Ethernet.
- Perfect for data center and SMB applications.
- Ideal for switches, servers, patch panels, or other equipment.

## Key Features

- Protected by CM-rated PVC jacket
- Stranded >99.95% Oxygen-free Copper
- Up to 550MHz with 1G/10G-T Speed, Support PoE/PoE+/PoE++ (IEEE 802.3af/at/bt)
- RJ45 Plugs with 50 Microinches Gold-plated Connectors
- Snagless Design Protects Clips When Plugging and Unplugging
- Multiple Colors and Lengths Helps Simplify Complicated Cable Runs
- 4 Twisted Pairs and Cross Separator Reduce Crosstalk, Noise and Interference
- Tested with a Fluke DSX-8000 Versiv CableAnalyzer
- CE, Reach, RoHS Certified

Specification

| Product Type             |                                                                                                     |
|--------------------------|-----------------------------------------------------------------------------------------------------|
| Shielding Type           | Unshielded (U/UTP)                                                                                  |
| Termination End          | RJ45 Plug                                                                                           |
| Reference Standard       | ISO/IEC 11801, ANSI/TIA-568.2-D                                                                     |
| Conductor                |                                                                                                     |
| Conductor Type           | Stranded                                                                                            |
| Conductor Material       | >99.95% Oxygen-free Copper                                                                          |
| Wire Gauge (AWG)         | 24 (7/0.20mm)                                                                                       |
| Conductor Qty.           | 4 Twisted Pairs                                                                                     |
| Insulation               |                                                                                                     |
| Insulation Material      | HDPE                                                                                                |
| Insulation Diameter (mm) | 0.98 ± 0.05                                                                                         |
| Core Color               | A. Orange, White-Orange,<br>B. Blue, White-Blue,<br>C. Green, White-Green,<br>D. Brown, White-Brown |
| Sheath                   |                                                                                                     |
| Material                 | PVC (Complies RoHS), CM                                                                             |
| Outer O.D. (mm)          | 6.1 ± 0.4                                                                                           |
| Thickness (mm)           | 0.55 ± 0.05                                                                                         |
| Color                    | Blue/Gray/Black/Red/Purple<br>Green/White/Yellow                                                    |
| Surface                  | Clean, Frap, Satiation                                                                              |

Specification

Electrical Characteristics (20 °C)

|                                            |             |
|--------------------------------------------|-------------|
| Data Rate Support                          | 1/10GBase-T |
| Standard Bandwidth (MHz)                   | 250         |
| Reference Bandwidth (MHz)                  | 550         |
| 1-250MHz, Characteristic Impedance (Ω)     | 100 ± 15    |
| Max. DC Conductor Resistance Unbalance (%) | 5.0         |
| 1-250MHz, Delay Skew 20°C (ns/100m)        | ≤45         |
| Max. DC Resistance 20°C (Ω/100m)           | 9.38        |

Mechanical Characteristics

|                                     |                   |
|-------------------------------------|-------------------|
| Before Aging Tensile Strength (Mpa) | ≥13.5             |
| Before Aging Elongation (%)         | ≥150              |
| Aging Period (°C×hrs)               | 100°C×24h×7d      |
| After Aging Tensile Strength (Mpa)  | ≥12.5             |
| After Aging Elongation (%)          | ≥125              |
| Cold Bend (-20±2°C×4h)              | No Visible Cracks |
| Min. Bend Radius (cm)               | 4.27 ± 0.3        |

Surface Printing

|                    |           |
|--------------------|-----------|
| Letter Height (mm) | 3.0 ± 0.3 |
| Color              | Black     |

Specification

| Others     |     |
|------------|-----|
| Rip Cord   | Yes |
| Drain Wire | No  |