

## ThePATCHCORD. RJ45 small diameter cable TECHNICAL DATA SHEET UTP Cat. 6A, (10Gb/s) Compatible Cat. 6 and 5E

ThePATCHCORD. RJ45 Patch Cords are designed, and individual tested for connections between the network equipment and patch panels, and for network user outlet. They are guaranteed for cat 6A, cat 6 and cat 5E TIA/EIA-568-C.2 component tests, to get a Channel Link certified on a Permanent Link certified for transmission frequencies of up to 500 MHz. They are compatible with the 10 Gigabits applications, and standard compliance with Amendment 1 and 2 to ISO/IEC 11801, 2<sup>nd</sup> Ed.

### ThePATCHCORD. main characteristics

- Small cable diameter, AWG 28
- Slim Connector Insert :
  - o designed to improve NEXT and RL for 10 Gigabits applications,
  - o designed for high density panels and active components (same size as the plug in width and height)
- Certified for 10 Gb/s applications
- 18 available lengths from 0.5 feet (0.15m) up to 100 feet (30m)
- Colour of sheath: 10 colors available with blue marking
- Colour of boot: White



|                                  |                                                                                           |
|----------------------------------|-------------------------------------------------------------------------------------------|
| <b>Number of pairs</b>           | 4                                                                                         |
| <b>Type</b>                      | U-UTP                                                                                     |
| <b>Conductor</b>                 | Stranded bare copper wire, 4 / 0.2 mm +/- 0.005 mm                                        |
| <b>Wire Gauge</b>                | 28 AWG                                                                                    |
| <b>Insulation</b>                | HDPE                                                                                      |
| <b>Individual pair screen</b>    | None                                                                                      |
| <b>Pair Screen</b>               | None                                                                                      |
| <b>Drain</b>                     | None                                                                                      |
| <b>Jacket</b>                    | PVC with blue printing                                                                    |
| <b>Overall diameter</b>          | 3.8 +/- 0.2 mm                                                                            |
| <b>Bending radius</b>            | 15,2 mm                                                                                   |
| <b>Plug housing</b>              | UL 1863 Polycarbonate ,individual wire guide and management bar                           |
| <b>Contacts</b>                  | Moved contacts                                                                            |
| <b>Contact Plating</b>           | 50 µ inches gold minimum (1.2 µm)                                                         |
| <b>Shielding</b>                 | None                                                                                      |
| <b>Power Over Ethernet (POE)</b> | Compatible POE, POE+, et 4PPOE (See the recommendations of TSB-184-A and TIA/EIA-568.2-D) |

### Mechanical Properties of the cable

| Fire Propagation Test  | Temperature range<br>During operation | Fire load | Bending radius      |
|------------------------|---------------------------------------|-----------|---------------------|
| UL 444 VW 1 Flame test | -20°C up to +75°C                     | 372 MJ/km | >25 mm without load |

### Electrical Properties of the cable (at 20°C +/- 5°C)

| Conductor resistance | Insulation resistance | Pair to ground unbalance capacitance | Impedance 1-100MHz | Impedance 100-250MHz | Propagation delay (1-250 mHz) | Test voltage in air |
|----------------------|-----------------------|--------------------------------------|--------------------|----------------------|-------------------------------|---------------------|
| < 223 Ω/km           | > 5 000 MΩ/km         | Nom. 3.3nF/km                        | 100 +/- 15 Ω       | 100 +/- 15 Ω         | < 45 ns/100m                  | 2000 V              |

## 10 COLORS



**VIOLET RED**

P/N = TPC-VR-U/XX



**STANDARD GREEN**

P/N = TPC-SG-U/XX



**APPLE GREEN**

P/N = TPC-AG-U/XX



**STANDARD YELLOW**

P/N = TPC-SY-U/XX



**STANDARD ORANGE**

P/N = TPC-OR-U/XX



**STANDARD RED**

P/N = TPC-SR-U/XX



**STANDARD BLUE**

P/N = TPC-SB-U/XX



**LIGHT BEIGE**

P/N = TPC-LB-U/XX



**LIGHT GREY**

P/N = TPC-LG-U/XX



**BRILLANT WHITE**

P/N = TPC-BW-U/XX

## 18 LENGTHS

|    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |       |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| ft | 0,5  | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 13   | 16   | 25   | 32   | 50    | 82    | 100   |
| m  | 0,15 | 0,30 | 0,60 | 0,90 | 1,20 | 1,50 | 1,80 | 2,10 | 2,40 | 2,70 | 3,10 | 4,00 | 4,90 | 7,60 | 9,70 | 15,20 | 25,00 | 30,00 |