

## Twisted Pair Patch Cable, Raw - Category 5e Class D - U/UTP



### Abstract

CAT 5e Class D, U/UTP, Twisted Pair Patch Cable, Raw, PVC, 100 MHz

### Application areas

Primary (Campus), Secondary (Riser), Tertiary (Horizontally)

IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T

IEEE 802.5: 16 MB; ISDN; FDDI; ATM; PoE

### Norms

ANSI/TIA 568-C; ISO/IEC 11801 2<sup>nd</sup> Ed.; EN 50173; EN 50288-3-1

### Physical Properties

|                                      |                                                    |
|--------------------------------------|----------------------------------------------------|
| Conductor                            | Bare annealed copper, stranded AWG 26/7            |
| Insulation                           | HD-PE (High Density Polyethylene)                  |
| Total number of insulated conductors | 8, twisted in 4 pairs                              |
| Color code                           | Blue-white, orange-white, green-white, brown-white |
| Individual pair shielding            | None                                               |
| Overall shielding                    | None                                               |
| Outer sheath                         | PVC                                                |
| Outer sheath diameter                | 0.55 mm nominal                                    |
| Outer sheath color                   | Grey (RAL 7035)                                    |

### Mechanical Properties

|                                         |                     |
|-----------------------------------------|---------------------|
| Tensile loading                         | 150 N max.          |
| Dynamic bending radius                  | 8x AD mm min.       |
| Static bending radius                   | 4x AD mm min.       |
| Shipping- and storage temperature range | -10 °C up to +75 °C |
| Operating temperature range             | -10 °C up to +60 °C |
| Installations temperature range         | 0 °C up to +50 °C   |
| Overall diameter                        | 4.6 mm nominal      |

### Electrical Properties

|                                     |                           |
|-------------------------------------|---------------------------|
| DC loop resistance                  | ≤ 280 Ω km                |
| Resistance unbalance                | ≤ 2%                      |
| Insulation resistance               | ≥ 2000MΩ/km @500V         |
| Capacitance                         | nom. 48 nF/km @ 800 Hz    |
| Capacitance unbalance (pair-ground) | ≤ 1500 nF/km              |
| Characeristic Impedance             | 100 ± 15 Ohm @ 10-100 MHz |
| NVP                                 | 67%                       |
| Propagation delay                   | nom. ≤ 555 ns/100 m       |
| Delay skew                          | nom. ≤ 50 ns/ 100 m       |
| Test voltage (DC 1 min) core/core   | 1000V                     |
| Coupling attenuation                | ≥ 4 dB                    |

### Transmission Properties

| FREQ. | ATT  | NEXT | PS NEXT | RL   | ACR  | PS ACR |
|-------|------|------|---------|------|------|--------|
| MHz   | dB   | dB   | dB      | dB   | dB   | dB     |
| 1     | 2.2  | 60.0 | 57.0    | 17.0 | 57.4 | 54.4   |
| 10    | 7.1  | 47.0 | 44.0    | 17.0 | 37.4 | 34.4   |
| 100   | 24.0 | 30.1 | 27.1    | 10.0 | 23.3 | 14.4   |

### Product Number Information

| Item code       | Length | Packaging |
|-----------------|--------|-----------|
| DK-1511-P-1-1   | 100 m  | Carton    |
| DK-1511-P-305-1 | 305 m  | Carton    |