



# CATEGORY 5e U/UTP OUTDOOR PE CABLE JACKET

**Product Type** LAN Cable

**Product Family** MultiLan

|                     |                     |
|---------------------|---------------------|
| <b>Construction</b> | RoHS Compliant      |
|                     | Category 5e         |
|                     | U/UTP (Unshielded)  |
|                     | Polyethylene Jacket |

## General Characteristics

**Features** 4 twisted-pair cable, using solid bare copper conductor 24 AWG, insulated with HDPE-high density polyethylene. External jacket using black LLDPE-linear low density polyethylene UV resistant suitable for outdoor application.

**Compatibility** FCS products

**Applications**  
 1. Cable comply with electrical requirements of ANSI/TIA-568-C.2 and ISO/IEC 11801  
 2. Cable comply with RoHS (Restriction of Hazardous Substances) directive  
 3. Cable is compatible with RJ-45 Cat 5e female

**Standards Compliance** ANSI/TIA-568-C.2, ISO/IEC 11801

## Constructive characteristic

**Conductor** Solid bare copper with nominal diameter 24AWG.

**Insulation** High density Polyethylene nominal diameter 0.94mm

**Insulation Resistance** 10000 MΩ/km

**Number of Pairs** 4 pairs 24 AWG

**Pair** All pairs are twisted in such way to reduce Crosstalk effects. Each conductor is identified according with the following color sequence.

## Color Codes

| Pair | Insulation Color "A" | Insulation Color "B"  |
|------|----------------------|-----------------------|
| 1    | Blue                 | White / Blue Stripe   |
| 2    | Orange               | White / Orange Stripe |
| 3    | Green                | White / Green Stripe  |
| 4    | Brown                | White / Brown Stripe  |

**Cabling** All four pairs are cabled together in such way to reduce electromagnetic interferences making the cable lay-up.

**Shield** Unshielded (U/UTP).

**Sheath** Black polyethylene (LLDPE) jacket, UV stabilized, suitable for outdoor application

|   |                           |
|---|---------------------------|
| <b>Nominal Diameter</b>                         | 5.0mm                     |
| <b>Color</b>                                    | Black polyethylene jacket |
| <b>Cable Weight</b>                             | 26 kg/km                  |
| <b>Physical Characteristics</b>                 |                           |
| <b>Installation Temperature</b>                 | 0°C up to 50°C            |
| <b>Storage Temperature</b>                      | -20 °C up to 70 °C        |
| <b>Operation Temperature</b>                    | -20°C up to 60°C          |
| <b>Electrical Characteristics</b>               |                           |
| <b>Maximum Unbalance Resistance</b>             | 5%                        |
| <b>Conductor Max. DC Resistance at 20°C</b>     | 93.8 Ω/km                 |
| <b>Maximum Mutual Capacitance 1kHz</b>          | 56 pF/m                   |
| <b>Max. Unbalance Capacitance Pair x Ground</b> | 3,3 pF/m                  |
| <b>Characteristic Impedance</b>                 | 100±15% Ω                 |
| <b>Maximum Propagation Delay</b>                | 545ns/100m @ 10MHz        |
| <b>Maximum Delay Skew</b>                       | 45ns/100m                 |
| <b>Dielectric strength</b>                      | 2500 VDC/3s               |
| <b>NVP</b>                                      | 68%                       |

**Transmission Performance**

| Frequency(MHZ) | Atenuation @ 20°C (dB/100m) Max | NEXT (dB) Min. | PS NEXT (dB) Min. | ACRF (dB) Min | PS ACRF (dB) Min | Return Loss (dB) Min |
|----------------|---------------------------------|----------------|-------------------|---------------|------------------|----------------------|
| 0.772          | 1.8                             | 67.0           | 64.0              | ---           | ---              | ---                  |
| 1              | 2.0                             | 65.3           | 62.3              | 63.8          | 60.8             | 20.0                 |
| 4              | 4.1                             | 56.3           | 53.3              | 51.8          | 48.8             | 23.0                 |
| 8              | 5.8                             | 51.8           | 48.8              | 45.7          | 42.7             | 24.5                 |
| 10             | 6.5                             | 50.3           | 47.3              | 43.8          | 40.8             | 25.0                 |
| 16             | 8.2                             | 47.2           | 44.2              | 39.7          | 36.7             | 25.0                 |
| 20             | 9.3                             | 45.8           | 42.8              | 37.8          | 34.8             | 25.0                 |
| 25             | 10.4                            | 44.3           | 41.3              | 35.8          | 32.8             | 24.3                 |
| 31.25          | 11.7                            | 42.9           | 39.9              | 33.9          | 30.9             | 23.6                 |
| 62.5           | 17.0                            | 38.4           | 35.4              | 27.9          | 24.9             | 21.5                 |
| 100            | 22.0                            | 35.3           | 32.3              | 23.8          | 20.8             | 20.1                 |

The transmission characteristics are based on measurements made cable samples taken from reels and placed over a flat non-conductive surface.

**Marking**

FURUKAWA MULTILAN U/UTP 24AWGX4P OUTDOOR JACKET VERIFIED TO TIA-568-C.2 CATEGORY 5E YAAMMDDHHmm (\*\*) m "

Traceability:

Y- Manufacturing Process

AAMMDDHHmm :AA-Year, MM-Month, DD - Day, HH - Hour, mm - minute

**Package**

Plastic spool

**Standard Lengh**

305 meters