


**Cable Standards**

The cable is compliant with:

- ISO61156-6 ed 2 and ANSI/TIA/EIA568C

It is also designed to be compliant with EN50288-10-2 when it is published.


**Independent 3rd Party Certification (3P)**
**PRODUCT DESCRIPTION:**

10GPlus U/FTP, 100 Ω, 4x2xAWG 26/1 is a premium grade Class EA / Augmented Category 6 cable to support 10 Gigabit Ethernet protocol for use within the data centre environment.

**PRODUCT PERFORMANCE:**
**Core**

- Conductor: 26 AWG Plain Annealed Copper Wire
- Insulation: Cellular Polyolefin
- Diameter: 0.99mm Nominal
- Pair: 2 of the above cores
- Tape Screen: Individual pair wrapped with aluminium polyester tape applied metal side out
- Pair Colour: Blue-White, Orange-White, Green-White, Brown-White

**Final Assembly**

- Cable: 4 of the above shielded pairs
- Drainwire: 0.5mm Tinned Annealed Copper Wire
- Sheath: LSHF compound

**Mechanical and Environmental**

- Temp-Installation: 0°C to +50°C
- Temp-Operation: -20°C to +75°C
- Max Tensile Load: 10kg per simplex cable (installation)
- Min Bend Radius: 8 x Outer Diameter (installation), 4 x Outer Diameter (operation)

Halogen Free cable types (LSHF) meet IEC 60754-1 and IEC 61034

**Brand-Rex Copper Cables - 10GPlus Zone Cable**

Communication Cable, U/FTP, 100 Ω, 4x2xAWG 26/1

| Electrical Characteristics @ 20°C | Specification                       | Typical Performance                                       |
|-----------------------------------|-------------------------------------|---|
| Conductor Loop Resistance         | < 29 Ω / 100m                       | 26  |
| Conductor Resistance Unbalance    | Max. 2%                             | 0,5%  |
| Dielectric Strength               | 1.0kV dc or 0.7kV ac for 1 min      | 100% in process test                                      |
| Insulation Resistance             | >5000M Ω/M @ 100-500 V test voltage | >5000M Ω /M   |
| Capacitance Unbalance to Earth    | Max. 160 pF/100m                    | 60 pF/100m  |
| Velocity of Propagation           | <537.6 nsec/100m @ 100MHz           | 440 nsec/100m @ 100MHz (NVP for hand held testers = 0.74) |
| Skew                              | Max. 45 nsec/100m @ 100MHz          | 5 nsec/100m @ 1100MHz                                     |
| Mean Characteristic Impedance     | 100 Ω ± 5 Ω @ 100MHz                | 100 Ω +/- 3 Ω @ 100MHz                                    |

| Characteristic | Typical Headroom vs Cat6 (250MHz) | Typical Headroom vs AC6 (500MHz) |
|----------------|-----------------------------------|----------------------------------|
| Return Loss    | 5dB                               | 5dB                              |
| Insertion Loss | 20%                               | 20%                              |
| NEXT           | 20dB                              | 20dB                             |
| PSNEXT         | 20dB                              | 20dB                             |
| ELFEXT         | 15dB                              | 15dB                             |
| PSELFEXT       | 15dB                              | 15dB                             |
| PSA ACR-N      | NA                                | 20dB                             |
| PSAACR-F       | NA                                | 20dB                             |

Typical headroom on key S/N characteristics - for information only

|                    | Typical Headroom vs Cat6 (250MHz) | Typical Headroom vs AC6 (500MHz) |
|--------------------|-----------------------------------|----------------------------------|
| PSACR @ 500MHz     | NA                                | 35dB                             |
| PSAACR-N* @ 500MHz | NA                                | 20dB                             |

\* Power Sum Attenuation to Alien Crosstalk (near end) Ratio  
The Alien crosstalk performance of cables is assessed using a '6 round 1' or '4 on a drum' method.

**Product Part Numbering**

| Part Number    | Length (m) | Cable type | Colour | Nominal Cable Diameter (mm) | Nominal Weight (Kg/Km) | Calorific Value kWh/m | Fire Safety Rating |
|----------------|------------|------------|--------|-----------------------------|------------------------|-----------------------|--------------------|
| AC6-DCZ-500VT  | 500        | LSHF       | Violet | 5.4                         | 33                     | 0.08                  | IEC 60332-1-2      |
| AC6-DCZ-1000VT | 1000       |            |        |                             |                        |                       |                    |
| AC6-DCZ-500GY  | 500        | LSHF       | Grey   | 5.4                         | 33                     | 0.08                  | IEC 60332-1-2      |
| AC6-DCZ-1000GY | 1000       |            |        |                             |                        |                       |                    |