



## GIGAMEDIA CAT6 OUTDOOR U/UTP PE SOLID CABLE



### APPLICATIONS

- Outside building installations (i.e IP cameras, acces points)
- Specifically designed to comply with Cat6 performance requirements
- Meet and exceed all TIA/EIA 568-C.2 cable performances
- IEEE 802.5 16 MB; 10Base-T; 100Base-T; 1000Base-T

### STANDARDS

- EIA/TIA 568-C.2
- ISO/IEC 11801; IEC 61156-5 ; EN50173 ; EN50288-6-1

### CONSTRUCTION

- **Conductors:** Bare copper conductor Ø 0.55 mm (AWG23) with polyethylene insulation
- **Insulation:** Polyethylene, Ø 1.0 mm
- **Assembly:** 4 twisted pairs with different pitches, non-metallic separator (spine)
- **External outer sheath:** LDPE RAL 9005
- **Internal jacket:** PVC grey
- **Outer diameter:** 7.0 mm

| ITEM    | EXTERNAL DIAMETRE | BEND RADIUS MINIMUM |              | Ø OF CONDUCTORS INSULATION | TEMPERATURE RATING | INSTALLATION TENSION |
|---------|-------------------|---------------------|--------------|----------------------------|--------------------|----------------------|
|         | (mm)              | (mm)                | (mm)         | (mm)                       | installation       | (N)                  |
| 4 pairs | 7.0               | operational         | installation | 1.0                        | -20 °C<br>+50 °C   | 80                   |
|         |                   | 4XOD                | 8XOD         |                            |                    |                      |

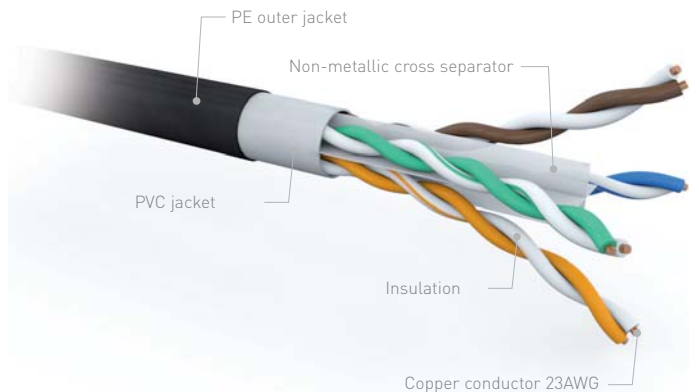
### MECHANICAL CHARACTERISTICS

- **Bending radius**
  - ≥ 4 x OD without load
  - ≥ 8 x OD with load
- **Temperature rating**
  - 20°C to + 60°C during operation
  - 0°C to + 50°C during installation



## ELECTRICAL CHARACTERISTICS (20°C ± 5°C)

- **Conductor resistance:** 93.8 Ω/km 20 °C max
- **Mutual Capacitance:** 5.6 nF/100m max
- **Resistance Unbalance:** 5% max
- **Capactance Unbalance:** 330 pF/100m max
- **Impedance:**  $F \leq 200$ : 100 ±15 Ω /  $F \geq 200$ : 100 ±22 Ω



## TRANSMISSION PERFORMANCE

| Frequency (MHz) | Attenuation Max (dB/100m) | NEXT (Pair to Pair) Min. (dB/100m) | PS NEXT Min. (dB/100m) | ACR Min. (dB) | FEXT (Pair to Pair) Min. (dB/100m) | PS ELFEXT Min. (dB/100m) |
|-----------------|---------------------------|------------------------------------|------------------------|---------------|------------------------------------|--------------------------|
| 0,772           | 1,8                       | 76                                 | 74                     | 74,2          | 70                                 | 67                       |
| 1               | 2                         | 74,3                               | 72,3                   | 72,3          | 67,8                               | 64,8                     |
| 4               | 3,8                       | 65,3                               | 63,3                   | 61,5          | 55,7                               | 52,7                     |
| 8               | 5,4                       | 60,8                               | 58,8                   | 55,4          | 49,7                               | 46,7                     |
| 10              | 6                         | 59,3                               | 57,3                   | 53,3          | 47,8                               | 44,8                     |
| 16              | 7,7                       | 56,3                               | 54,3                   | 48,6          | 43,7                               | 40,7                     |
| 20              | 8,6                       | 54,8                               | 52,8                   | 46,2          | 41,7                               | 38,7                     |
| 25              | 9,6                       | 53,3                               | 51,3                   | 43,7          | 39,8                               | 36,8                     |
| 31,25           | 10,8                      | 51,9                               | 49,9                   | 41,1          | 37,9                               | 34,9                     |
| 62,5            | 15,7                      | 47,4                               | 45,4                   | 31,7          | 31,8                               | 28,8                     |
| 100             | 20,2                      | 44,3                               | 42,3                   | 24,1          | 27,8                               | 24,8                     |
| 200             | 29,8                      | 39,8                               | 37,8                   | 10            | 21,7                               | 18,7                     |
| 250             | 33,8                      | 38,3                               | 36,3                   | 4,6           | 19,8                               | 16,8                     |

## ORDERING INFORMATION

| P/N                   | DESCRIPTION   |
|-----------------------|---|
| <b>GGM C6U4PPEDC1</b> | 4 pairs AWG23 U/UTP PE/PVC Outdoor black - Coil 100 m |
| <b>GGM C6U4PPEDT3</b> | 4 pairs AWG23 U/UTP PE/PVC Outdoor black - Drum 305 m |
| <b>GGM C6U4PPEDT5</b> | 4 pairs AWG23 U/UTP PE/PVC Outdoor black - Drum 500 m |

