

# External CAT6 Unscreened Twisted Pair (UTP) Cable PE CPR FCA



## FEATURES

25 YEAR SYSTEM WARRANTY

PE OUTER SHEATH

FAST FEED REELEX PACKAGING

CATEGORY 6 COMPLIANT:  
TIA-568C.2; EN50173-1; ISO/IEC 11801

EC VERIFIED

23AWG CONDUCTOR

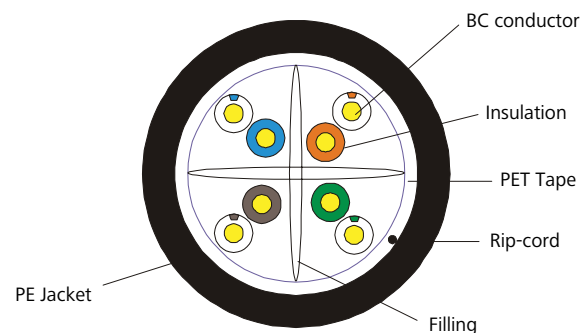
'305-0' METRE MARKED

CPR COMPLIANT TO FCA

## PRODUCT OVERVIEW

C-NET Category 6 UTP cables are manufactured and tested to the TIA/EIA 568-B.2-1, EN50173-1 and ISO/IEC 11801 Category 6 specifications. Each cable consists of 8 colour coded 23AWG polyethylene insulated conductors. These are twisted together to form 4 pairs with varying lay lengths. These pairs are then formed around a central 'X' shaped polyethylene filler. This filler assists in maintaining and enhancing the cables performance.

The printing detail along the outer sheath includes the cable part code, specification detail and our new 305 to 0 metre marked system. As the cable is dispensed from the Reel in a box the sequential marking counts down from 305 to 0 metres, as well as reducing waste and accounting easily for cables installed, this innovative print legend finally removes the guesswork from assessing the amount of cable remaining in partly used boxes.



## SPECIFICATION

|                                       |  |
|---------------------------------------|--|
| Overall Diameter                      | 6.3mm  |
| Installation Temperature Range        | -30°C to +50°C   |
| Nominal Velocity of Propagation (NVP) | 69%  |
| Bend Radius                           | 4 x overall diameter installed, 8x during installation |
| Cable weight                          | 13KGS/100m   |
| 305m Reel Weight                      | 13KGS (inc. box)                                       |
| Box Dimensions                        | 270mm wide x 330mm high x 320mm deep                   |
| Cable jacket tested to                | IEC 62321, US EPA 3540C, BS EN 14582                   |
| Impedance                             | 100 ± 15 Ω   |

## PERFORMANCE OVERVIEW

C-NET Category 6 cables are manufactured and tested to the Category 6 performance standards defined by the TIA, ISO and EN standards bodies. A range of performance characteristics are tested up to 250MHz including return loss, attenuation and near and far end crosstalk (NEXT and FEXT) for which both worst case and power sum tests are completed. Actual performance far exceeds the required standard – when tested in isolation and in circuit – resulting in significant headroom for even the most demanding of applications.

As well as providing link and channel compliance with the aforementioned specification – when installed with C-NET category 6 components – the cable is also backward compatible with Category 5 and 5e components.

## TECHNICAL PERFORMANCE (100M)

| FREQUENCY (MHz) | RL ≥dB | ATT(20°C) ≤dB | NEXT ≥dB | PHASE DELAY ≤ns | PSNEXT ≥dB | ELFEXT ≥dB | PSELFEXT ≥dB |
|-----------------|--------|---------------|----------|-----------------|------------|------------|--------------|
| 1               | 20.0   | 2.03          | 74.3     | 570.00          | 72.3       | 67.8       | 64.8         |
| 4.0             | 23.0   | 3.78          | 65.3     | 552.00          | 63.3       | 55.8       | 52.8         |
| 8.0             | 24.5   | 5.32          | 60.8     | 546.73          | 58.8       | 49.7       | 46.7         |
| 10.0            | 25.0   | 5.95          | 59.3     | 545.38          | 57.3       | 47.8       | 44.8         |
| 16.0            | 25.0   | 7.55          | 56.2     | 543.00          | 54.2       | 43.7       | 40.7         |
| 20.0            | 25.0   | 8.47          | 54.8     | 542.05          | 52.8       | 41.8       | 38.8         |
| 25.0            | 24.3   | 9.51          | 53.3     | 541.20          | 41.3       | 39.8       | 36.8         |
| 31.25           | 23.6   | 10.67         | 51.9     | 540.44          | 49.9       | 37.9       | 34.9         |
| 62.5            | 21.5   | 15.38         | 47.7     | 538.55          | 45.4       | 31.9       | 28.9         |
| 100             | 20.1   | 19.80         | 44.3     | 537.60          | 42.3       | 27.8       | 24.8         |
| 200             | 18.0   | 28.98         | 39.8     | 536.54          | 37.8       | 21.8       | 18.8         |
| 250             | 17.3   | 32.85         | 38.3     | 536.27          | 36.3       | 19.8       | 16.8         |

## TYPICAL APPLICATIONS

- 1000BASE-T Gigabit Ethernet
- 100BASE-TX Fast Ethernet
- 622 Mbps ATM
- 155 Mbps ATM
- Composite Video

## PART NUMBER INFORMATION

| PART NO.    | DESCRIPTION  |
|-------------|--|
| QUCAT6PE-EX | Category 6 Unscreened (U/UTP) Cable PE Black, 305m Reel in a box, Violet, 305m box |

## SYSTEM WARRANTY

The C-NET Cabling System Warranty provides a 25 year product and applications assurance of compliance with the industry performance standard appropriate to the class of cabling installed.

The warranty may be applied for by a registered approved C-NET (AI) Associated Installer who has designed, supplied and installed the relevant system.

