



# Qing Cables

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## F-UTP CAT6

250MHz 4 Pair 23AWG Solid Conductor CAT6 [ISO/IEC11801, TIA/EIA568B]

Qing Cables Structured Wiring range is designed to offer higher performance than the standard Category 6 cables available today. These cables are designed for faultless signal transmission and offer headroom to support today's bandwidth intensive applications for twisted pair cabling whether it be in data networks, control systems, CCTV over IP, home connectivity, or digital signage.

These cables exceed performance standards for TIA/EIA 568-C.2 Category 6, ISO/IEC 11801 Ed2 Class E; and EN 50173-1:2011.

Cables supplied in 305m reel boxes are sequentially meter marked to ensure you always know the amount of cable remaining at your disposal, sheath printing includes batch marking for full quality traceability.

In addition to the CAT6 F-UTP Cables described here, we also stock CAT5e U-UTP and F-UTP Cables, CAT6 UTP, CAT6A, CAT7, and CAT7A.

### Physical Characteristics

|   | LSZH Sheath  | External PE Sheath                    |
|---|--|---------------------------------------|
| Conductor:                              | Solid Bare Copper Wire   |                                       |
| Size:                                   | 23AWG (1/0.565 ±0.005)   |                                       |
| Nº of Pairs:                            | 4 Pairs [w/ Plastic Separator]                                     |                                       |
| Insulation:                             | HDPE Ø 1.008mm (±0.02mm)   |                                       |
| Screening:                              | Alu Foil [+23AWG Drain Wire]                                       |                                       |
| Outer Sheath Material:                  | LSZH   | UV Resistant External PE to ISO4892-3 |
| Outer Sheath Dimensions:                | Ø7.40mm (±0.3mm)   |                                       |
| Sheath Colours:                         | Purple / Orange  | Black                                 |
| EN50575 CPR Class:                      | D <sub>ca</sub> , s <sub>2</sub> , d <sub>2</sub> , a <sub>1</sub> | F <sub>ca</sub>                       |
| Weight:                                 | 65kg/km  |                                       |
| Operating Temperature                   | -40°C - +75°C  |                                       |
| Installation Temperature                | -30°C - +65°C  |                                       |
| CIBSE TM65 Embodied Carbon per 305m box | 110kgCO <sub>2</sub> e   |                                       |

### Electrical Characteristics

|   |   |
|---|---|
| Conductor DC Resistance                 | 93.8 [Ω/km]   |
| Conductor Resistance Unbalance (%) Max  | 5.0   |
| Capacitive unbalance to earth (pf/100m) | 330   |
| Characteristic Impedance                | 1.0 – 250MHz 100Ω (±15)<br>350 – 400MHz 100Ω (±20)<br>450 – 550MHz 100Ω (±22) |
| Velocity Ratio                          | 65%   |
| Voltage Rating                          | 600V  |
| Spark Test                              | 2.5kV   |

LSZH Sheath meets:  
IEC60332-1 [Flame Propagation]  
IEC60754 [Halogen Free]  
IEC61034 [Smoke Emissions]

| Frequency (MHz) | RL (dB) min. | Attenuation (dB/100m) max ≤ | NEXT (dB) ≥ | PSNEXT (dB) ≥ | PSELFEXT (dB) ≥ | ELFEXT (dB) ≥ |
|-----------------|--------------|-----------------------------|-------------|---------------|-----------------|---------------|
| 1               | 20.0         | 1.9                         | 74.0        | 7.3           | 65.0            | 68.0          |
| 4               | 23.0         | 3.7                         | 65.0        | 63.3          | 53.0            | 56.0          |
| 8               | 24.5         | 5.3                         | 60.7        | 58.8          | 56.9            | 49.9          |
| 10              | 25.0         | 5.9                         | 59.0        | 57.3          | 45.0            | 48.0          |
| 16              | 25.0         | 7.5                         | 56.0        | 54.2          | 40.9            | 43.9          |
| 20              | 25.0         | 8.4                         | 55.0        | 52.8          | 39.0            | 42.0          |
| 25              | 24.3         | 9.5                         | 53.3        | 51.3          | 37.0            | 40.0          |
| 31.25           | 23.6         | 10.6                        | 52.0        | 49.9          | 35.1            | 38.1          |
| 62.5            | 21.5         | 15.4                        | 47.0        | 45.4          | 29.1            | 32.1          |
| 100             | 20.1         | 19.8                        | 44.0        | 42.3          | 25.0            | 28.0          |
| 200             | 18.0         | 29.0                        | 40.0        | 37.8          | 19.0            | 22.0          |
| 250             | 17.3         | 32.8                        | 38.0        | 36.3          | 17.0            | 20.0          |

### Colour Code

|        |                      |        |                    |
|--------|----------------------|--------|--------------------|
| Pair 1 | Blue, White/Blue     | Pair 3 | Green, White/Green |
| Pair 2 | Orange, White/Orange | Pair 4 | Brown, White/Brown |



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This specification and images

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### Our full product range includes:

COAXIALS: RG / URM Digital / Satellite (incl Sky+) [CAI Approved] CCTV RF / Microwave  
TELECOM: CW1308LSZH CW1308B CW1128 CW1128/1198 CW1128/1252 Dropwire Jumper Wire CW1311 3002 Coax Flat Cordage  
STRUCTURED WIRING: CAT5e UTP & FTP CAT6 UTP & FTP CAT6A U-UTP & U-FTP CAT7A S-FTP [PVC LSZH External UV PE SWA Versions]  
DATA: Single Pair Shielded/Unshielded Overall Shielded Core Overall Shielded Pairs Foil & Braid Shield Individual Shielded Pairs Twinax [Belden Equivalents]  
DEF STANDARD: 7/0.2 Unscreened / Screened 16/0.2 Unscreened / Screened  
CCTV / SECURITY: RG/URM Coaxial Video/Door Entry Composites BS4737 Alarm Flex Mains Flex PH30/PH120 Fire Performance Cable  
FIBRE OPTICS: Singlemode/Multimode Loose Tube/Tight Buffer Internal/External LSZH Corrugated Armour/SWA  
SPEAKER FLEX: "QCSound" Pro Grade OFC Cores LSZH Sheaths External Grade  
CONNECTED HOME: QCMCS [2x HDTV Coax] + [2x CAT6] + [1x CAT5e]  
CONTROL BUS CABLES: KNX/EIB Bus Cables DataBus® DiviceNet™ PROFIBUS Lutron Grafik Eye® CRESSNET® SIMMTRONIC - EBus / MBus / OBus Echelon LonWorks® Mode Lighting  
MAINS FLEX: H03VV-F H03VVH2-F H05VV-F H05Z1Z1-F BS6500/BS7919 Arctic Grade H07RN-F  
SOLAR: TUV Approved PV Cable.

All our products are RoHS2 [2015/863] and REACH Compliant unless stated otherwise

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### Statement of Conformance

It is hereby certified that any goods supplied that reference those above, conform to this specification unless otherwise noted