

# Essential-6 Cable

ESSENTIAL-6 U/UTP CAT 6 PVC 23AWG 305M REEL IN BOX

**Aginode Ref:** N100.170-GB1-D

- Unshielded construction
- Complies to latest Category 6 standards
- Central cross maintains geometry and performance
- Supports Class E applications up to 250 MHz.

## Application

The Aginode Essential-6 cables are manufactured and tested to the latest Category 6 specifications. They are compatible with the complete Essential-6 modular and PCB connectivity range. When the cable is installed in conjunction with Essential-6 outlets and patch panels, a 25 year Class E Link Certificate can be obtained from the Aginode website.

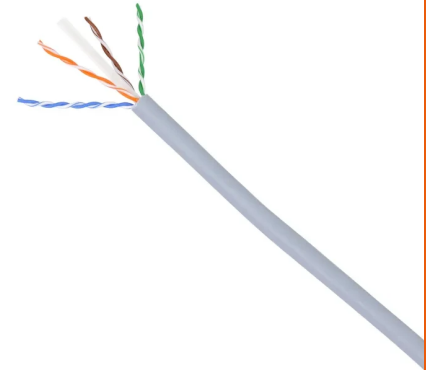
## Performance

Aginode Essential-6 cables are compliant with the requirements of the International, European and American cable standards, including ISO/IEC 11801, IEC 61156-5, EN 50173, EN 50288 and TIA/EIA 568-C.2.

## Installation

To support the correct set-up of hand held analysers for installation testing, the actual cable NVP value is given in the cable's print legend.

**Values given for 2-connector channel, built with Essential-6 cable, outlet and patch panel. (Values specified at 20°C)**



## STANDARDS

ANSI/TIA-568-C.2  
IEC 61156-5  
ISO/IEC 11801-1  
GB 31247

# Essential-6 U/UTP Cat 6 PVC 23AWG 305m reel in box

## Characteristics

### Construction characteristics

|               |       |
|---------------|-------|
| Colour        | Grey  |
| Outer sheath  | LSZH  |
| Type of cable | U/UTP |

### Dimensional characteristics

|                                     |        |
|-------------------------------------|--------|
| Conductor cross-section (AWG/KCMIL) | 23     |
| Diameter over insulation            | 1.0 mm |
| Nominal outer diameter (mm)         | 6.2 mm |

### Electrical characteristics

|  |          |
|--|----------|
| Mutual capacitance                                   | 56 nF/km |
| Characteristic impedance                             | 100 Ohm  |
| Max. DC resistance of the conductor at 20°C (Ohm/km) | 93.8     |

### Mechanical characteristics

|                                 |       |
|---------------------------------|-------|
| Maximum operating pulling force | 100 N |
|---------------------------------|-------|

### Transmission characteristics

|                                       |             |
|---------------------------------------|-------------|
| Skew                                  | 45 ns/100m  |
| Attenuation Crosstalk Ratio, 250MHz   | 5.5 dB/100m |
| Nominal Velocity of Propagation (NVP) | 69 %        |
| Propagation delay, max. 100 MHz       | 536 ns/100m |

### Usage characteristics

|                              |                       |
|------------------------------|-----------------------|
| Range                        | essential-6           |
| Field of application         | Indoor                |
| Length                       | 305 m                 |
| Operating temperature, range | -20...60 °C           |
| Category                     | Cat. 6                |
| Flame retardant              | GB31247 B1 (d0.t0.a1) |
| Smoke density                | IEC 61034-2           |
| Packaging                    | Drum                  |

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Aginode is indicative only and shall not be binding on Aginode or be treated as constituting a representation on the part of Aginode.

|   |             |
|---|-------------|
| Ambient installation temperature, range                   | -10...60 °C |
| Minimum Bend Radius - During Installation (under Tension) | 50 mm       |
| Minimum Bend Radius - Installed                           | 25 mm       |

## ドキュメンテーション

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