

# Essential-6 U/UTP Cable

ESSENTIAL-6 U/UTP AWG24 CAT 6 LSZH ECA ORANGE 305M BOX

**Aginode Ref:** N100.161-OE

- 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.

## Design

The Essential-6 cables have 24 AWG solid copper wires and comply with IEC 60228. The PE central cross filler keeps the pairs in place and reduces the risks of losing performance when bending the cable.

The cables are available with a Light Grey PVC or an Orange LSZH outer jacket.

## 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

The Essential-6 cables are as easy to install as their Category 5e equivalent, due to their small nominal outer diameter.

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.



## STANDARDS

ANSI/TIA-568-C.2  
ISO/IEC 11801

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.

# Essential-6 U/UTP AWG24 Cat 6 LSZH Eca Orange 305m box

## Characteristics

### Construction characteristics

Colour	Orange
Outer sheath	LSZH
Type of cable	U/UTP

### Dimensional characteristics

Approximate weight	35 kg/km
Conductor cross-section (AWG/KCMIL)	24
Diameter over insulation	0.94 mm
Nominal outer diameter (mm)	5.7 mm

### Electrical characteristics

Characteristic impedance	100 Ohm
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### Transmission characteristics

Skew	30 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
Operating temperature, range	-20...60 °C
Category	Cat. 6
Flame retardant	IEC 60332-1
Smoke density	IEC 61034
Packaging	Box 305 m
Ambient installation temperature, range	-10...60 °C
Minimum Bend Radius - During Installation (under Tension)	46 mm
Minimum Bend Radius - Installed	23 mm

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## Documentation

DoP EN N100161-OE pdf — 186.08 KB [Download](#) ↓

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## Declaration of Performance

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