

FTP cat.5e Copper with Messenger

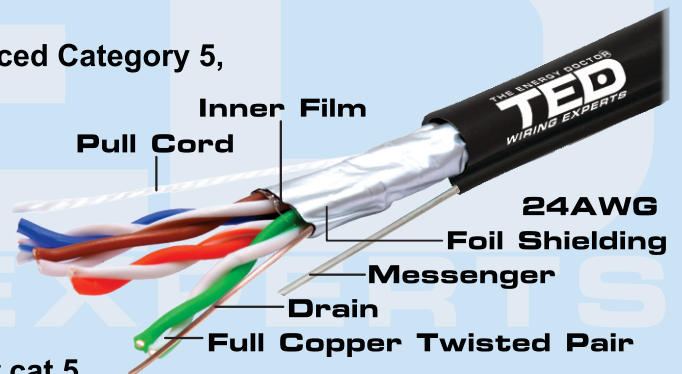
Category 5e (cat.5e) cable, also known as Enhanced Category 5, is designed to support full-duplex Fast Ethernet operation and Gigabit Ethernet.

The performance requirements have been raised slightly in the new standard.

Cat.5e has stricter specifications for Power Sum Equal-Level Far-End Crosstalk (PS-ELFEXT), Near-End Crosstalk (NEXT), Attenuation, and Return Loss (RL) than those for cat.5.

Like cat.5, cat.5e is a 100 MHz standard, but it has the capacity to handle bandwidth superior to that of cat.5.

Cat.5 cable is typically used for Ethernet networks running at 100 Mbps.



Construction	
Conductor	4 x 2 x 0.5 mm Full Copper 24 AWG
Messenger	1.3mm Solid Steel With PVC, Nominal Diameter 2.5mm
Insulation	0.8 mm High-density Polyethylene
Diameter Over Insulation / Nominal Outer Diameter	0.88 mm / 5.6 mm
Mechanical Characteristics	
Sheath Tensile Strength	25 MPa
Minimum Bending Radius	50 mm
Normal Weight	49 kg/km
Operating Temperature	-20°C +70°C
Installation Temperature	-5°C +40°C
Product Length	305m in Carton Box or 500m Stranded
Electrical Performance	
Conductor Resistance	98 Ohms/km
Transmission Frequency (MHz)	4 8 10 16 20 25 31.25 62.5 100
Attenuation (dB/100m)	4.1 5.8 6.5 8.2 9.3 10.4 11.7 17 22
Near End Crosstalk NEXT (dB/100m)	56.3 51.8 50.3 47.2 45.8 44.3 42.9 38.4 35.3
Powersum Near End Crosstalk PS NEXT (dB/100m)	53.3 48.8 47.3 44.2 42.8 41.3 39.9 35.4 32.3
Return Loss (dB/100m)	33 33 33 32 33 34 28 29 24
Equal Level Far End Crosstalk ELFEXT (dB/100m)	51.8 45.7 43.8 39.7 37.8 35.8 33.8 27.9 23.8
Powersum Equal Level Far End Crosstalk (dB/100m)	48.8 42.7 40.8 36.7 34.8 32.8 30.9 24.9 20.8
Characteristic Impedance (Ohms)	100+/-15
Screw (ns/100m)	45
Nominal Velocity of Propagation (%)	69
Propagation Delay, max. 100 MHz (ns/100m)	550
Coupling Attenuation at 30 MHz	70

Due to continuous product improvements, program specifications are subject to change without notice