

Cat6E UTP/FTP Armoured Data Cable



Conductors
Insulation
Bedding
Twinning
Armour
Outer Sheath



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Insulation
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Shielding
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Applications :

Cat6 Cable is a cable standard for Gigabit Ethernet and other network protocol, suitable for 10BaseT, 100BaseTx & 1000BaseT (Gigabit Ethernet) application. In addition, these cables are with copper wire braid armoured & flame retardant mud resistant outer sheath, providing additional mechanically protection still maintaining the flexibility of the cable.

Standards :

IEC 60332-3-22
IEC 60754-1,2
IEC 61034-1,2
NEK 606:2004

Conductors :

23AWG solid bare copper.

Insulation :

HDPE.

Twinning :

Two coloured insulated conductors twisted together to form a pair.

Bedding :

Flame retardant, low smoke and halogen-free polyolefin, coloured black.

Armour :

0.2/0.3mm copper wire braid.

Outer Sheath :

Low smoke and halogen-free polyolefin.

Optional :

Cat6 F/UTP : These cables have collective shielding of aluminium/Polyester tape with drain wire.
Cat6 SF/UTP :These cables have double collective shieldings of aluminium/Polyester tape & copper wire braid with drain wire.

Electrical Characteristics :

AWG		24
Nominal Conductor Diameter	mm	0.58
Maximum DC Resistant@20°C	Ω/100m	9.38
Maximum DCR Unbalance	%	3
Maximum Mutual Capacitance	pF/m	5.8
Maximum Capacitance Unbalance	pF/100m	30

Characteristic Impedance@1-100MHz	Ω	100+/-15
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Maximum Propagation Delay Skew	ns/100m	18
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FREQ MHz	Maximum Attenuation dB/100m	Minimum NEXT dB	Minimum PSNEXT dB	Minimum ELFEXT dB/100m	Minimum PSELFEXT dB/100m	Minimum RL dB
0.772	1.8	76.0	74.0	70.0	67.0	—
1	2.0	74.3	72.3	67.8	64.8	20.0
4	3.8	65.3	63.3	55.7	52.7	23.0
8	5.3	60.8	58.8	49.7	46.7	24.5
10	6.0	59.3	57.3	47.8	44.8	25.0
16	7.6	56.3	54.3	43.7	40.7	25.0
20	8.5	54.8	52.8	41.7	38.7	25.0
25	9.5	53.3	51.3	39.8	36.8	24.3
31.25	10.7	51.9	49.9	37.9	34.9	23.6
62.5	15.4	47.4	45.4	31.8	28.8	21.5
100	19.8	44.3	42.3	27.8	24.8	20.1
155	25.2	41.5	39.5	23.9	20.9	18.8
200	29.0	39.8	37.8	21.7	18.7	18.0
250	32.8	38.3	36.3	19.8	16.8	17.3

Mechanical and Thermal Properties :

Bending Radius : 8×OD (during installation); 4×OD (fixed installed).

Temperature Range : -30°C ~ +75°C.

Dimensions and Weight :

Construction No. of elements×No. of cores in element×Conductor diameter (mm ²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
4×2×0.58	0.2	1.2	11.5	214