

# CAT 6 **UTP** Cable



# **Application**

A multi-pair performance cable that consists of twisted pair conductors, used mainly for data transmission.

Category 6 is recommended for all new installations, supports a frequency range of up to 250MHz and is designed for transmission speeds of up to 1 gigabit per second (Gigabit Ethernet).

# **Standards**

ISO / IEC 11801, TIA 568C.2, YD/T1019

### Characteristics

**Temperature Rating** Fixed: -20°C to +60°C

**Minimum Bending Radius** 

Fixed: 4 x overall diameter Flexed: 8 x overall diameter



# Construction

#### Conductor

Class 1 solid copper conductor

#### Insulation

HDPE (High Density Polyethylene)

#### Sheath

PVC (Polyvinyl chloride)

#### **Sheath Colour**

Grey











# **Dimensions**

NO. OF PAIRS	AWG	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/305m box	
4	23	1.02	6.7	16	

# **Performance Characteristics**

FREQUENCY MHz	ATTENUATION dB/100m	NEXT dB	PS-NEXT dB	RL dB	ELFEXT dB	PS-ELFEXT dB/100m	PHASE DELAY
1	2.03	74.3	72.3	20	67.8	64.8	570
4	3.78	65.3	63.3	23	55.8	52.8	552
8	5.32	60.8	58.8	24.5	49.7	46.7	546.73
10	5.95	59.3	57.3	25	47.8	44.8	545.38
16	7.55	56.2	54.2	25	43.7	40.7	543
20	8.47	54.8	52.8	25	41.8	38.8	542.05
25	9.51	53.3	51.3	24.3	39.8	36.8	541.2
31.25	10.67	51.9	49.9	23.6	37.9	34.9	540.44
62.5	15.38	47.7	45.4	21.5	31.9	28.9	538.55
100	19.80	44.3	42.3	20.1	27.8	24.8	537.6
200	28.98	39.8	37.8	18	21.8	18.8	536.54
250	32,85	38.3	36.3	17.3	19.8	16.8	536.27

Electrical Characteristics

VELOCITY RATIO %	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km	MAXIMUM RESISTANCE UNBALANCE %	
68	95	5	

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