



## Cat 6 (500MHz) UTP PVC Cable

**Applications:** Support full and half duplex operation, digital/analogic video, 16Mbps Token Ring, 100Mbps TP-PMOD, 100 BASE-T (IEE802.3), 1000 BASE-YT (Gigabit Ethernet), 155/622 Mbps ATM and 1.2 Gbps ATM

### Construction

Conductor	23 awg solid bare copper (0.57mm)
Insulation	Polyolefine
Pair	4 twisted pairs: white / blue, white / orange, white / green and white / brown. Conductor identification according to IEC 60304
Sheath	Grey PVC (IEC 60332-1)
BATT Part Number	77090

### Standards

IEC 60332-1, UNE-EN 50265-2-, EC Verified (DELTA), Cable Certificado a 500MHz, ANSI/TIA/EIA 568-B.2-1 (Cat 6), ISO/IEC 11801:2002, EN 50173:2002

### General Characteristics

DC resistance (max) 0hm/100m (328ft) at 20°C	8.90
Resistance unbalance (max) Individual pair %	2.0
Mutual capacitance (nominal) nF/100m (328ft) at 1kHz	5.20
Nominal velocity of propagation NVP (% speed of light)	68
Characteristic impedance (Ohm)	
Value at	1,0 – 100 MHz 85-115 100 – 350 MHz 78-122 350 – 500 MHz 68-132
Propagation Delay (man) (ns at 10MHz)	518
Delay skew (max) (ns/100m)	45
External diameter (mm)	6.2
Weight (kg/km)	42
Minimum bending radius (mm)	4 x outer diameter = 25





Electrical Characteristics

**Attenuation**

Freq. MHz	0.772	1	4	8	10	16	25	31,25	62,5	100	155	200	250	350	400	500
dB/100m max	1.6	1.8	3.5	5	6.5	8.2	8.8	9.9	14.1	18	22.7	26	29.2	35.1	38.1	43

**NEXT**

Freq. MHz	0.772	1	4	8	10	16	25	31,25	62,5	100	155	200	250	350	400	500
dB min	77.5	76.7	72.1	69.9	69.2	67.6	66.2	65.4	61.9	58.9	56.0	54.3	52.9	50.7	49.8	48.4

**Power Sum - NEXT**

Freq. MHz	0.772	1	4	8	10	16	25	31,25	62,5	100	155	200	250	350	400	500
dB min	74.5	73.7	69.1	66.9	66.2	64.6	63.2	62.4	58.9	55.9	53.0	51.3	49.9	47.7	46.8	45.4

**Power Sum -ELFEXT**

Freq. MHz	0.772	1	4	8	10	16	25	31,25	62,5	100	155	200	250	350	400	500
dB min	71.1	70.0	64.0	59.9	58.0	53.9	50.0	48.1	42.1	38.0	34.2	32.0	30.0	27.1	26.0	24.0

**ACR**

Freq. MHz	0.772	1	4	8	10	16	25	31,25	62,5	100	155	200	250	350	400	500
db/100m min	94.8	92.9	82	75.9	73.9	69.3	64.5	61.9	53.1	46.1	38.5	33.5	28.8	20.7	16.8	10.5

**Power Sum - ACR**

Freq. MHz	0.772	1	4	8	10	16	25	31,25	62,5	100	155	200	250	350	400	500
db/100m min	92	90.1	79	72.8	70.8	66.2	61.3	58.7	49.9	42.8	35.1	30.1	25.4	17.2	13.3	6.9

**Return Loss**

Freq. MHz	0.772	1	4	8	10	16	25	31,25	62,5	100	155	200	250	350	400	500
dB min	-	37.4	35.6	34.7	34.4	33.8	33.6	33.3	33	32.1	31.5	30.6	30.4	-	-	-