

## CATEGORY 6 UTP NETWORK CABLES

### CONSTRUCTION

CONDUCTOR	: Solid circular plain annealed copper wire, Class 1
INSULATION	: HDPE (high density polyethylene)
COLOUR OF CORES	: Pair 1 - Blue and White / Blue Pair 2 - Orange and White / Orange Pair 3 - Green and White / Green Pair 4 - Brown and White / Brown
DIVIDER	: PE Material
RIP CORD	: Nylon rope
SHEATH (JACKET)	: PVC, White colour, Flame Retardant to VW-1 test
STANDARDS	: TIA / EIA-2-1, UL444 / CSA22.2 & ISO / IEC-11801



4 pairs x 23 AWG UTP Category 6 Cable

Cable Dimensions			Electrical Properties		
Cable size	: 4 Pr x 23 AWG (1/0.58mm)	dc conductor resistance at 20°C	: ≤ 73.2	Ω/km	
Nom. Insulation thickness	: 0.22 mm	dc conductor resistance unbalance	: ≤ 5	%	
Nom. sheath thickness	: 0.6 mm	Characteristic impedance	: 100±15	Ω	
Approx. overall diameter	: 6.0 mm	Mutual capacitance	: ≤ 5600	pF/100m	
Approx. net weight	: 12.2 kg/coil	Pair to ground capacitance unbalance	: ≤ 330	pF/100m	
Cable length per coil	: 305 m	Delay skew	: ≤ 45	ns/100m	

### Transmission Characteristics

Frequency MHz	Attenuation (Insertion) Loss	NEXT	PS NEXT	ACR	PS ACR	ELFEXT	PS ELFEXT	Return Loss
	Max. dB/100m	Min. dB	Min. dB	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB
1	2.0	74.3	72.3	72.3	70.3	67.8	64.8	20.0
4	3.8	65.3	63.3	61.5	59.5	55.8	52.8	23.0
8	5.3	60.8	58.8	55.5	53.5	49.7	46.7	24.5
10	6.0	59.3	57.3	53.3	51.3	47.8	44.8	25.0
16	7.6	56.2	54.2	48.6	46.6	43.7	40.7	25.0
20	8.5	54.8	52.8	46.3	44.3	41.8	38.8	25.0
25	9.5	53.3	51.3	43.8	41.8	39.8	36.8	24.3
31.25	10.7	51.9	49.9	41.2	39.2	37.9	34.9	23.6
62.5	15.4	47.4	45.4	32.0	30.0	31.9	28.9	21.5
100	19.8	44.3	42.3	24.5	22.5	27.8	24.8	20.1
200	29.0	39.8	37.8	10.8	8.8	21.8	18.8	18.0
250	32.8	38.3	36.3	5.5	3.5	19.8	16.8	17.3