

### Description

Cat 6 UTP Data Cable Consists of 4 Pair PE Insulated 23AWG Solid Annealed Bare Copper Conductors, PE Cross Separator, rip cord and PVC outer Sheath

### Application

These structure cable suitable for 10Gigabyte Ethernet Applications and compatible with all known connection Systems, Ideal for high performance workstation applications including voice/data systems, Digital video, Broadband and Voice over internet protocol etc.

### Features

- Complies to the requirements of TIA/EIA 568 C.2 and ISO/ IEC 11801 – 2nd Edition
- Cable Characterized up to 250 MHz,
- Full Power Sum Performance.
- Flammability of Sheath IEC 60332 -1

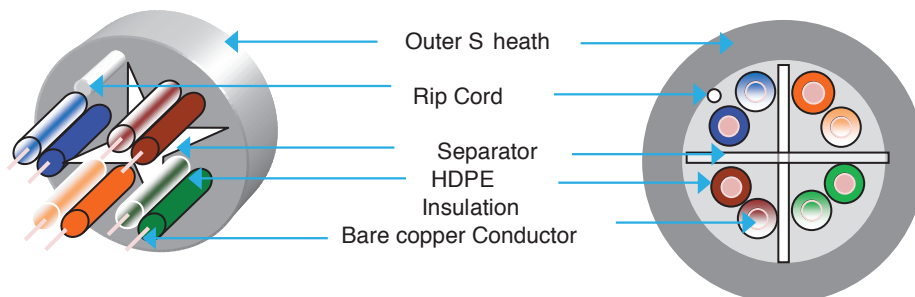
### Colour Code

- Pair 1: White – Blue, Blue
- Pair 2: White – Orange, Orange
- Pair 3: White – Green, Green
- Pair 4: White – Brown, Brown

### CABLE MARKING

Marking Medium: Ink Jet Printing in contrasting Colour on the Cable Surface at every Meter

### CABLE CONSTRUCTION & CROSS-SECTION



Conductor	: 23 AWG (0.56 ± 0.01mm) Solid Bare Copper conductor
Insulation	: High Density Polyethylene, Diameter (1.02± 0.03mm)
Pairs	: Two Insulated conductors Twisted together to form pair
Twisting	: 4 pairs laid together and separated by cross element
Sheath	: PVC, Colour: GREY,VIOLET
Cable Diameter	: 6.20 ± 0.30 mm



# COPPER SYSTEM

## ELECTRICAL CHARACTERISTICS (at 20°C on 100m cable length)

Conductor Resistance	Max. 9.38 $\Omega$ /100m
Conductor Resistance Unbalance	Max. 4 %
Mutual Capacitance	Max. 5.6 nF/100m
Capacitance Earth Unbalance	Max. 330 pF/100m
Propagation Delay @ 1, 10, 100 & 250 MHz	Max. 570, 545, 538 & 536 ns/100 m
Propagation DeLay Skew 1 – 250 MHz	Max. 45 ns/100 m
Characteristic Impedance (1-250 MHz)	100 $\pm$ 15 $\Omega$

## TRANSMISSION CHARACTERISTICS

Freq (MHz)	Attenuation (dB/100m)	NEXT (dB)	PSNEXT (dB)	ACRF (ELFEXT) (dB)	PSACRF [PSELFEXT] (dB)	Return Loss (dB)	TCL (dB)	ELTCL (dB)
	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.
1.0	2.0	74.3	72.3	67.8	64.8	20.0	40	35.0
4.0	3.8	65.3	63.3	55.8	52.8	23.0	40	23.0
8.0	5.3	60.8	58.8	49.7	46.7	24.5	40	16.9
10.0	6.0	59.3	57.3	47.8	44.8	25.0	40	15.0
16.0	7.6	56.2	54.2	43.7	40.7	25.0	38	10.9
20.0	8.5	54.8	52.8	41.8	38.8	25.0	37	9.0
25.0	9.5	53.3	51.3	39.8	36.8	24.3	36	7.0
31.25	10.7	51.9	49.9	37.9	34.9	23.6	35.1	5.5 @ 30 MHz
62.5	15.4	47.4	45.4	31.9	28.9	21.5	32.0	
100	19.8	44.3	42.3	27.8	24.8	20.1	30.0	
200	29.0	39.8	37.8	21.8	18.8	18.0	27.0	
250	32.8	38.3	36.3	19.8	16.8	17.3	26.0	

## Mechanical Properties

Bending radius: 4 x overall diameter (min.)

Breaking strength: 400 N (max.)

## Thermal Characteristics

Temperature Range: -20° C up to +60° C

## ORDERING INFORMATION

PART NUMBER	DESCRIPTION	COLOUR
APC-4-C6VT	Apsys Networks Category 6 UTP 23 AWG 305m PVC Cable	Violet
APC-4-C6GY	Apsys Networks Category 6 UTP 23 AWG 305m PVC Cable	Grey
APC-4-C6VT5	Apsys Networks Category 6 UTP 23 AWG 500m PVC Cable	Violet
APC-4-C6GY5	Apsys Networks Category 6 UTP 23 AWG 500m PVC Cable	Grey

