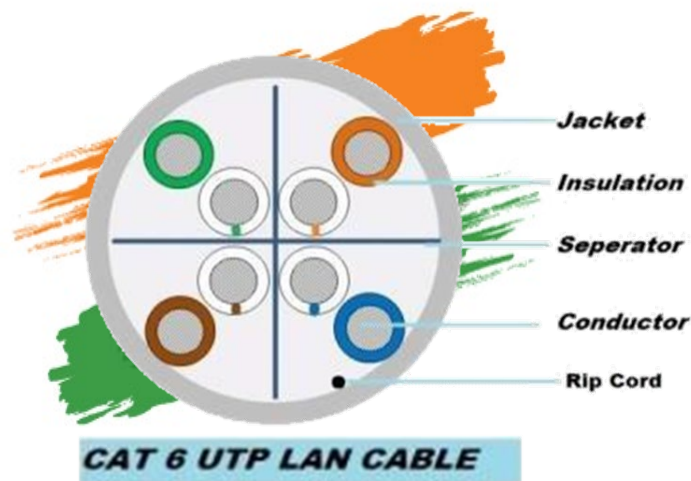


# PT-CLN6-P/G

## CAT6 23 AWG UTP CABLE



TECHNICAL DATASHEET			
S.NO.	DESCRIPTION	UNIT	PARAMETERS
1	CABLE TYPE		CAT6 4P X 23 AWG UTP CABLE
2	APPLICABLE STANDARDS		ISO/IEC11801 ,ANSI/TIA-568-C.2,RoHS 2.0
3	CONDUCTOR		
a)	Material		Solid Bare Copper (99.90%)
b)	Size	AWG	23 AWG (0.55 ± 0.015 mm)
c)	Tensile Strength	Mpa	≥ 200
d)	Elongation	%	≥ 15 , over Insulation
4	INSULATION		
a)	Material		Polyethylene (HDPE)
b)	Dia. Of insulation	mm	0.98 ± 0.05
c)	Tensile Strength Before Ageing	Mpa	>13.5
d)	Elongation at Break	%	≥ 300
5	PAIR FORMATION		
a)	Pairing		Twisted into Two core
b)	No. of pair	Nos.	4, each Pair twisted

	<b>COLOR CHART</b>		
<b>6</b>	Pair #1		Orange-White with Orange
	Pair #2		Brown-White with Brown
	Pair #3		Blue-White with Blue
	Pair #4		Green-White with Green
<b>7</b>	Pair Lay Length	mm	Pair 1= 18.0 mm Pair 2= 15.0 mm Pair 3 = 10.50 mm Pair 4= 12.30 mm
<b>8</b>	Overall Lay Length	mm	100
<b>9</b>	<b>OUTER SHEATH</b>		
a)	Material		PVC- Polyvinyl Chloride
b)	Thickness	mm	0.50 ± 0.10
c)	Colour of outer sheath		Grey
d)	Approximate Overall Diameter	mm	6.0 ± 0.30
e)	Tensile Strength Before Ageing	Mpa	>13.5
f)	Elongation at Break	%	≥ 150
g)	Ageing Period		100 Deg C x 24h x 10d
h)	Tensile Strength After Ageing	Mpa	>12.5
i)	Elongation at Break	%	≥ 125
j)	Cold Bend @ '-20 +/- 2 Deg C for 4h, 8 x Cable O.D,		No Visible Cracks
k)	PVC Sheath Hardness@ 27 Deg C	Shore D	46 ± 2 as per ASTM- D 2240
<b>10</b>	Rip Cord		Yes
<b>11</b>	Sequential Marking	Mtr	At Every Meter
<b>12</b>	Cross Filler		HDPE Sepertor with size-4.4 mm
<b>13</b>	<b>PACKING</b>		
a)	Material		305 Mtrs in Tangle Free box Packaging Dimension 400 mm (W) x 400 mm (H) x 210 (D)
b)	Cable Length (Tolerance	Mtr	305 ± 1.5

	with individual length)		
c)	Weight	Kg	12.3 ± 0.5
<b>14</b>	<b>PHYSICAL CHARACTERISTICS</b>		
a)	Installation Temperature	°C	0 to +50°C
b)	Storage Temperature	°C	-20 to +75°C
c)	Operating Temperature	°C	-20 to +75°C
<b>15</b>	<b>ELECTRICAL PARAMETER</b>		
a)	Conductor Resistance (DC)	Ω/100 Mtr	9.38 @20°C Max
b)	Resistance Unbalance	%	5 Max
c)	Mutual Capacitance	nF/100 Mtr	5.6 Max
d)	NVP	%	69
e)	Impedance @ ≤ 100 MHz	Ω	100 ± 15
	@ 100 -250 MHz	Ω	100 ± 25
f)	Operating voltage	V	60
g)	1.0-250.0 MHz delay skew	ns/100mtr	45 (max)

\*Specifications are subject to change without prior notice. \*Product picture may differ from the actual.

**HIGH FREQUENCY ELECTRICAL PARAMETERS (As Per EIA/TIA 568.C.2 Clause 6.4)  
Horizontal**

FREQ(MHz)	ATT (dB/100 m) max.	NEXT (dB/100m) min.	PS.NEXT (dB/100 m) min.	ACRF (dB/100m) min.	PS.ACRF (dB/100 m) min	Return Loss (dB/100 m) min.	Prop. Delay (ns/100m) max.
1	2	74.3	72.3	67.8	64.8	20	570
4	3.8	66.3	63.3	56	53	23	552
8	5.3	61.8	58.8	49.9	46.9	24.5	547
10	6	60.3	57.3	48	45	25	545
16	7.6	57.2	54.2	43.9	40.9	25	543
20	8.5	55.8	52.8	42	39	25	542
25	9.5	54.3	51.3	40	37	24.3	541
31.25	10.7	52.9	49.9	38.1	35.1	23.6	540
62.5	15.4	48.4	45.4	32.1	29.1	21.5	539
100	19.8	45.3	42.3	28	25	20.1	538
200	29	40.8	37.8	22	19	18	537
250	32.8	39.3	36.3	20	17	17.3	536