

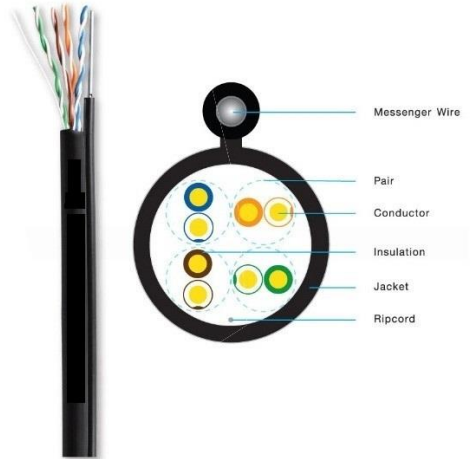
## CAT6 UTP Outdoor Double Jacket With Drop Wire (600MHz) , 23AWG, LSZH

### FEATURES AND BENEFIT

This specification covers the general requirements for UTP cable used for outdoor and indoor installation Ultra Category 6 U/UTP outdoor double jacket with drop wire cables compliant ISO/IEC 11801 Class E and ANSI/TIA-568.2-D requirements for category 6 performance. These cables are characterized to 600MHz, The cables are designed for outdoor aerial installation with drop wire for CCTV system or other

### APPLICATION

- 2.5G/5G BASE-T ( IEEE 802.3bz)
- 10G BASE-T( IEEE 802.3an 10Gigabit Ethernet ) \*55m
- 1000 BASE-T ( IEEE 802.3ab Gigabit Ethernet )
- 1000 BASE-TX (TIA/EIA-854)
- 100 BASE-TX ( IEEE 802.3u Fast Ethernet )
- 10 BASE-T ( IEEE 802.3i Ethernet )
- 52/155/622Mbps and 1.2Gbps ATM
- 4/16 Mbps Token Ring
- IEEE 802.3af (PoE), IEEE 802.3at (PoE+), IEEE 802.3bt (Type 4)
- TP-PMD, TPDDI, ISDN, CDDI, VoIP
- Ether CAT Industrial standard, HD Base T 2.0 standard
- Baseband, Broadband
- Digital and analog for data, video and audio application



### STANDARD

- ANSI/TIA-568.2-D Category 6
- ANSI/TIA-568-C.2 Category 6
- ISO/IEC 11801:2017 class E
- EN 50173-1 Category 6
- EN 50288-6-1
- IEC 61156-5, IEC 60332-1
- IEC 60754-1, IEC 60754-2
- IEC 61034-1, IEC 61034-2
- ICEA S-102-700 Category 6
- ASTM D4566-98
- NEMA WC 66
- UL 444
- CSA 22.2 No.214
- RoHS Compliant

### CABLE CONSTRUCTION

<b>Conductor</b>	<b>Material</b> <b>No. of Conductor</b> <b>Diameter</b>	Solid bare copper 4 Pairs (8 wires) 23 AWG (0.56mm)
<b>Insulation</b>	<b>Material</b> <b>Diameter</b>	High Density polyethylene (HDPE) 1.00 ±0.02 mm
<b>Ripcord</b>		Under Outer Jacket



<b>Color code with Strip color</b>	<b>Pair 1</b> <b>Pair 2</b> <b>Pair 3</b> <b>Pair 4</b>	White with blue strip + Blue White with orange strip + Orange White with green strip + Green White with brown strip + Brown
<b>Filler slot (Cross Filler)</b>	Material	FR-PE
<b>Drop Wire (Messenger Wire)</b>	Material <b>Diameter</b>	Galvanize Steel Wire (1.3 ±0.2 mm) 1.3 ±0.2 mm
<b>Inner Jacket</b>	Material Thickness Color <b>Diameter</b>	Lead tree, FR-PVC 0.51 ±0.02 mm Black 6.1 ±0.2 mm
<b>Outer Jacket</b>	Material Thickness Color <b>Diameter</b>	UV-Proof, PE 0.65 ±0.02 mm Black 7.4 ±0.2 mm
<b>Marking</b>	White color in every meter	
<b>Flame Rating</b>	CMX	

**PERFORMANCE CHARACTERISTIC** (meet or exceed ANSI/TIA-568.2-D Category 6)

Frequency ( MHz)	Insertion Loss (dB/100m)	NEXT (dB)		ACR-N (dB)		PS NEXT (dB)		PS ACR-N (dB)		ACR-F (dB)		PS ACR-F (dB)		RL (dB)	
		Max.	min	nom	min	nom	min	nom	min	nom	min	nom	min	nom	min
0.772	1.8	79.0	82	77.2	80.2	77.0	79.0	75.2	77.2	70.0	73	67.0	69	-	-
1	2.0	78.0	81.0	76.0	79.3	76.0	78.0	73.5	75.8	69.0	72.0	66.0	68.0	20.0	28.0
4	3.8	69.8	72.8	66.0	69.0	67.0	69.0	62.7	65.0	56.6	59.5	53.5	55.5	23.5	31.0
8	5.3	65.4	68.4	60.1	62.8	63.4	65.4	57.1	58.8	51.0	53.1	48.0	50.0	24.5	32.5
10	6.0	63.8	66.8	57.8	61.1	61.2	63.2	54.5	56.8	48.5	51.5	46.4	48.4	25.0	33.0
16	7.6	60.0	63.0	52.4	55.7	58.9	60.9	49.9	52.2	45.0	48.0	42.2	44.2	25.0	33.0
20	8.5	59.0	61.0	50.5	53.3	57.0	59.0	48.0	49.8	42.5	45.5	4.1	42.1	25.0	33.0
25	9.5	57.5	60.5	48.0	51.3	56.8	58.8	44.9	47.2	41.0	44.0	37.7	39.7	24.3	32.3
31.25	10.7	56.0	59.0	45.3	46.2	54.0	56.0	42.8	44.7	38.5	41.5	25.6	37.6	23.6	31.6
62.5	15.4	50.5	53.5	35.1	38.4	52.2	54.2	33.0	35.0	33.0	36.0	29.5	31.5	21.5	29.5
100	19.8	47.5	50.5	27.7	30.9	49.8	51.8	25.6	27.8	28.5	31.5	25.8	27.8	20.1	28.1
200	24.7	44.4	47.4	15.4	18.0	45.0	47.0	12.3	13.9	22.5	25.5	21.7	23.7	18.0	26.0
250	28.9	42.9	45.9	10.9	13.1	43.2	45.2	6.5	8.6	21.2	24.2	18.0	20.0	17.3	25.3
300	32.8	41.5	43.5	4.9	6.5	40.7	42.7	1.9	4.0	18.5	21.5	15.6	17.6	16.8	24.8
350	36.4	39.5	42.5	1.0	3.1	38.5	40.5	-	-	17.5	20.5	14.5	16.5	16.3	24.3
400	39.7	38.5	41.5	-	-	37.5	39.5	-	-	16.5	19.5	13.7	15.7	15.9	23.9
450	42.9	38.0	41.0	-	-	36.5	38.5	-	-	15.5	18.5	12.8	14.8	15.5	23.5
500	46.0	37.5	40.5	-	-	35.5	37.5	-	-	14.5	17.5	11.5	13.5	15.2	23.2
550	48.9	36.7	39.7	-	-	34.5	36.5	-	-	13.5	16.5	10.7	12.7	14.9	22.9
600	51.1	36.5	39.5	-	-	34.5	36.5	-	-	13.0	15.0	10.0	12.0	14.7	22.7

**ELECTRICAL CHARACTERISTIC**

<b>Impedance</b>	100 ± 5 Ohms, 1 MHz to 600 MHz
<b>Mutual Capacitance</b>	≤ 5.6 nF Max / 100m
<b>Capacitance, Unbalance</b>	≤ 160 pF Max / 100m
<b>DC Resistance</b>	≤ 6.658 ohm Max./100m

# NAP

<b>DC Resistance, Unbalance</b>	≤ 5% Max.
<b>Dielectric Strength</b>	≤ 1 kV/min
<b>Insulated Resistance</b>	≥ 5000 MΩ/km
<b>AC leakage current through overall jacket</b>	≤ 10mA (1.5 kV AC)
<b>Spark Test</b>	2.5 kV DC
<b>Propagation Delay</b>	≤ 536 ns/100m Max @600MHz
<b>Delay Skew</b>	≤ 30 ns Max
<b>NVP</b>	69%

## PHYSICAL PROPERTIES

<b>Tensile Strength</b>	110 N (25 lbf)
<b>Ultimate Breaking Strength</b>	>400 N (90lbf)
<b>Min. Bending Radius</b>	4 X Cable Diameter
<b>Temperature</b>	<b>Installation/Operation</b> -20°C to 75°C
	<b>Storage</b> -20°C to 80°C