



US-9106MD

US-9106MD-1

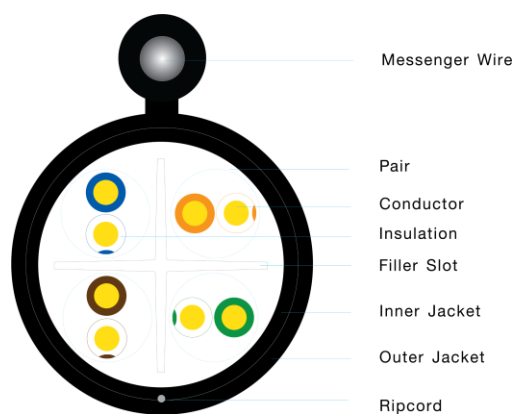


## CAT6 UTP Outdoor Double Jacket with Drop wire (600MHz), 23AWG

### Scope of Applications

This specification covers the general requirements for UTP cable used for outdoor and indoor installation (remove the outer jacket for indoor installation) LINK 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, Powersum NEXT tested certified. The cables are designed for outdoor aerial installation with drop wire for CCTV system or other.

### Drawing



### Technical Standards

- 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
- ICEA S-102-700 Category 6
- UL 444 / NEC Article 800
- ASTM D4566-98
- CSA 22.2 No.214
- RoHS Compliant



## Cable Construction

<b>Conductor</b>	<b>Material</b>	Solid Bare Copper
	<b>No. of Conductor</b>	4 Pairs (8 wires)
	<b>Diameter</b>	23 AWG
<b>Insulation</b>	<b>Material</b>	High-Density Polyethylene (HDPE)
	<b>Diameter</b>	1.00 ±0.02 mm
<b>Insulated Conductor Color Code</b>	<b>Pair 1</b>	White-Blue / Blue
	<b>Pair 2</b>	White-Orange / Orange
	<b>Pair 3</b>	White- Green / Green
	<b>Pair 4</b>	White-Brown / Brown
<b>Filler Slot (Cross Filler)</b>	<b>Material</b>	FRPE
<b>Inner Jacket</b>	<b>Material</b>	Lead-free, FR-PVC
	<b>Thickness</b>	0.51 ±0.02 mm
	<b>Color</b>	Black
	<b>Diameter</b>	6.1 ±0.2 mm
<b>Ripcord</b>		Under Outer Jacket
<b>Drop Wire (Messenger Wire)</b>	<b>Material</b>	Galvanize Steel Wire (1.3 ±0.2 mm)
	<b>Diameter</b>	3.0 ±0.2 mm
<b>Outer Jacket</b>	<b>Material</b>	UV-Proof, PE
	<b>Thickness</b>	0.65 ±0.02 mm
	<b>Color</b>	Black
<b>Cable Diameter</b>		7.4 ±0.2 mm
<b>Overall Diameter</b>		11.5 ±0.2 mm
<b>Marking</b>		White color in every meter
<b>Flame Rating</b>		CMX

## Electrical Characteristic

<b>Impedance</b>	100 ± 15 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>	≤ 6.658ohm Max./100m
<b>DC Resistance, Unbalance</b>	≤ 2.5% Max.
<b>Dielectric Strength</b>	≤ 1 kV/min
<b>Insulated Resistance</b>	≥ 5000 MΩ/km
<b>AC leakage current through the 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>	1400N	
<b>Ultimate Breaking Strength</b>	>400 N (90lbf)	
<b>Tensile Strength of Jacket</b>	16.5 Mpa	
<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



## 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	56.5	59.5	53.5	55.5	23.0	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	40.1	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	35.6	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

## Applications

- 2.5G/5G BASE-T (IEEE 802.3bz)
- 10G BASE-T (IEEE 802.3an 10Gigabit Ethernet) \*Limit distance
- 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 (Type4)
- TP-PMD, TPDDI, ISDN, CDDI, VoIP
- EtherCAT Industrial standard, HDBaseT 2.0 standard
- Baseband, Broadband
- Digital and analog for data, video and audio application



## Order Information

Part number	Description	Color	Length	Package
US-9106MD	Category 6, 4 Pairs, U/UTP Cable, 23AWG, Outdoor Double Jacket with Drop wire, 600MHz	Black	305 m	Reel in Box
US-9106MD-1	Category 6, 4 Pairs, U/UTP Cable, 23AWG, Outdoor Double Jacket with Drop wire, 600MHz	Black	100 m	Reel in Box

\*Other jacket color available on request

Specifications subject to change without notice.

© 2023 LINK CORP. ALL RIGHTS RESERVED

[www.linkcable.com](http://www.linkcable.com)

US-9106MD-V1.1-221124