



US-9106PW

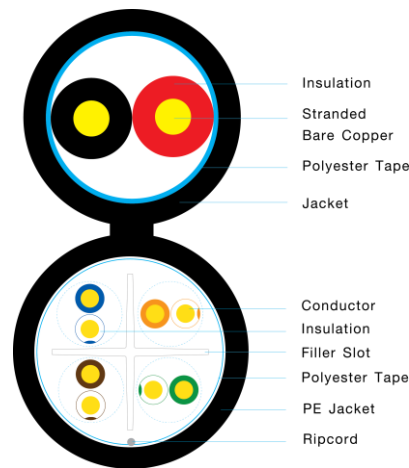
US-9106PW-1



Scope of Applications

LINK Ultra Category 6 U/UTP outdoor cables compliant ISO/IEC 11801 Class E and ANSI/TIA-568.2-E requirements for category 6 performance. These cables are characterized to 600MHz, Powersum NEXT tested certified. The cables are designed for outdoor horizontal and two power wire for support AC & DC power, support CCTV & IP Camera or other.

Drawing



Technical Standards

- ANSI/TIA-568.2-E Category 6
- 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

Conductor	Material	Solid bare copper
	No. of Conductor	4 Pairs (8 wires)
	Diameter	23 AWG
Insulation	Material	High Density Polyethylene (HDPE)
	Diameter	0.95 ±0.02 mm
Insulated Conductor Color Code	Pair 1	White-Blue / Blue
	Pair 2	White-Orange / Orange
	Pair 3	White- Green / Green
	Pair 4	White-Brown / Brown
Filler Slot (Cross Filler)	Material	FRPE
Power wire	Material	18 AWG Stranded Bare Copper
	No. Conductor	2
	Insulation Color	Red & Black
	Diameter	5.5 ±0.2 mm
Rip cord		Under Outer Jacket
Outer Jacket	Material	UV-Proof, PE
	Thickness	0.70 ±0.02 mm
	Color	Black
Cable Diameter		6.5 ±0.2 mm
Overall Diameter		12.6 ±0.2 mm
Marking		White every meter
Flame Rating		CMX

Electrical Characteristic

Impedance	100 ± 15 Ohms, 1 MHz to 600 MHz
Mutual Capacitance	≤ 5.6 nF Max / 100m
Capacitance, Unbalance	≤ 160 pF Max / 100m
DC Resistance	≤ 6.658ohm Max./100m
DC Resistance, Unbalance	≤ 2.5% Max.
Dielectric Strength	≤ 1 kV/min
Insulated Resistance	≥ 5000 MΩ/km
AC leakage current through overall jacket	≤ 10mA (1.5 kV AC)
Spark Test	2.5 kV DC
Propagation Delay	≤ 536 ns/100m Max @600MHz
Delay Skew	≤ 30 ns Max
NVP	69%

Physical Properties

Tensile Strength		1200N
Ultimate Breaking Strength		>400 N (90lbf)
Tensile Strength of Jacket		16.5 Mpa (2400 PSI)
Min. Bending Radius		4 X Cable Diameter
Temperature	Installation/Operation	-40°C to 75°C
	Storage	-40°C to 80°C



PERFORMANCE CHARACTERISTIC (meet or exceed ANSI/TIA-568.2-E 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	nom
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-9106PW	Category 6, 4 Pairs, U/UTP Cable, 23AWG, Outdoor Power wire, 600MHz	Black	305 m	Reel in Box
US-9106PW-1	Category 6, 4 Pairs, U/UTP Cable, 23AWG, Outdoor Power wire, 600MHz	Black	100 m	Reel in Box

*Other jacket color available on request

Specifications subject to change without notice.

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