

# Category 6 Ultra (600MHz) w/Power Wire Cables

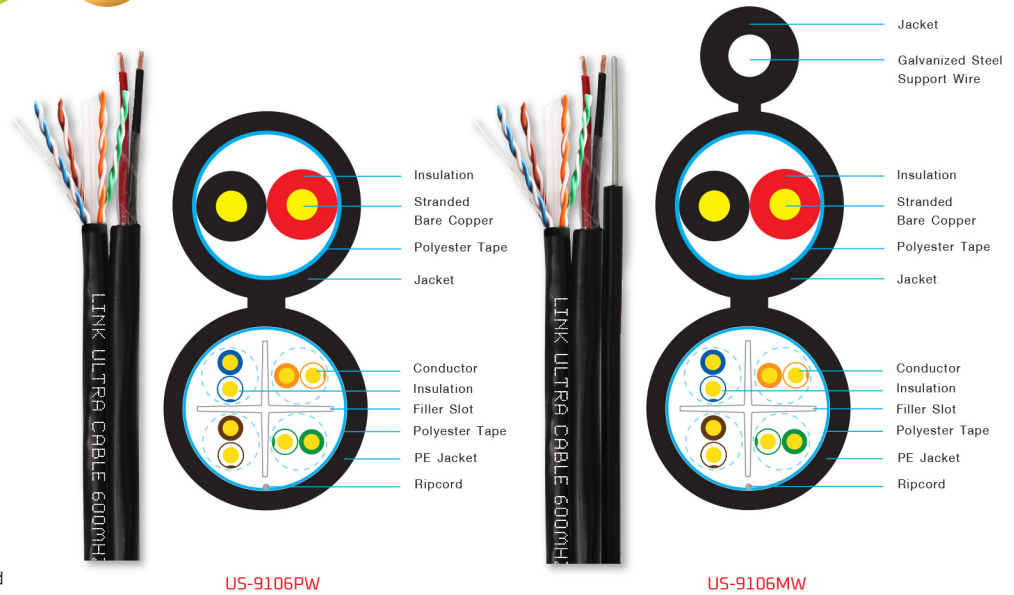


## STANDARD

- ANSI/TIA-568.2-D Category 6
- ISO/IEC 11801:2017 Class E
- EN 50173-1 Category 6
- ICEA 5-102-700 Category 6
- EN 50288-6-1
- IEC 61156-5
- UL444, NEC800
- RoHS Compliant

## APPLICATION

- 10G BASE-T (IEEE 802.3an) \*55m
- 2.5G/5G BASE-T (IEEE 802.3bz)
- 10/100/1000 BASE-T (IEEE 802.3i/u/ab)
- IEEE 802.3af/at (PoE/PoE+)
- 52/155/622 Mbps and 1.2 Gbps ATM
- 4/16 Mbps Token Ring
- TP-PMD, TPDDI, ISDN, CDDI, VoIP
- HD BaseT 2.0 standard, Baseband, Broadband
- Digital & Analog for data, video and audio application



## ELECTRICAL CHARACTERS

<b>Impedance</b>	: 100±15Ω, 1 MHz to 600 MHz
<b>Mutual Capacitance</b>	: 5.6 nFMax / 100m
<b>Capacitance,Unbalance</b>	: 160 pF Max / 100m
<b>DC Resistance</b>	: 6.65 ohm Max/100m
<b>DC Resistance,Unbalance</b>	: 2.5% Max.
<b>Insulated Resistance</b>	: 5000 MΩ/Km
<b>Dielectric Strength</b>	: 1kV/min
<b>Propagation Delay</b>	: 536 ns/100m Max @600MHz
<b>Delay Skew</b>	: 30 ns Max

## CONSTRUCTION / MATERIAL

<b>Conductor</b>	: 23AWG Solid Bare Copper
<b>Insulation</b>	: HDPE
<b>Filler Slot</b>	: FRPE
<b>Mylar Type</b>	: Polyester Tape
<b>Ripcord</b>	: Under Jacket
<b>Jacket</b>	: UV-Proof, PE
<b>Power Wire</b>	: 24 x 0.2 mm Stranded Bare Copper (18 AWG)
<b>Messenger Wire</b>	: Galvanize Steel Wire, 1.3mm for US-9106MW

FREQUENCY (MHZ)	INSERTION LOSS (dB/100m)	NEXT MIN.(dB)	ACR MIN.(dB)	PS NEXT MIN.(dB)	PS ACR MIN.(dB)	ELFEXT MIN.(dB/100m)	PS ELFEXT MIN.(dB/100m)	RL MIN.(dB)
1	2.0	78.0	76.0	76.0	73.5	69.0	66.0	20.0
31.25	10.7	56.0	45.3	54.0	42.8	38.5	35.6	23.6
62.5	15.4	50.5	35.1	52.2	33.0	33.0	29.5	21.5
100	19.8	47.5	27.7	49.8	25.6	28.5	25.8	20.1
155	25.1	45.0	19.7	47.2	17.2	25.0	23.0	18.8
200	29.0	44.4	15.4	45.0	12.3	22.5	21.7	18.0
250	28.69	42.9	10.9	43.2	6.5	21.2	18.0	17.3
300	32.8	41.5	4.9	40.7	1.9	18.5	15.6	16.8
400	39.7	38.5	-	37.5	-	16.5	13.7	15.9
550	48.9	36.7	-	34.5	-	13.5	10.7	14.9
600	51.1	36.5	-	34.5	-	13.0	10.0	14.7

## MECHANICAL PROPERTIES

### Minimum Bending Radius

Installation 8 X Cable Diameter

### Tensile Strength

Operation 4 X Cable Diameter

9.7 MPa (1400 PSI) for US-9106PW

16.5 MPa (2400 PSI) for US-9106MW

### Installation / Operating temperature

-40°C to 75°C

### Storage Temperature

-40°C to 80°C

Part No.	Cable Type	Conductor	Jacket	Diameter (mm.)	Color	Packaging
US-9106PW	Outdoor	23AWG Solid Bare Copper	PE	6.5	Black	305m/Reel in Box
US-9106MW	Outdoor	23AWG Solid Bare Copper	PE	6.5	Black	305m/Reel in Box
US-9106PW-1	Outdoor	23AWG Solid Bare Copper	PE	6.5	Black	100m/Reel in Box
US-9106MW-1	Outdoor	23AWG Solid Bare Copper	PE	6.5	Black	100m/Reel in Box