



US-9015M

US-9015M-1

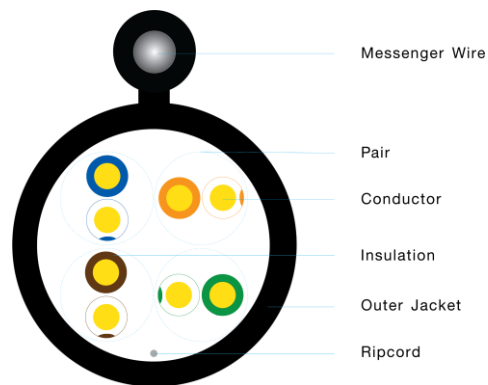


## CAT 5e UTP PE Outdoor w/Drop wire (350MHz), 24AWG

### 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 Enhanced Category 5e U/UTP outdoor with drop wire cables compliant ISO/IEC 11801 Class D and ANSI/TIA-568.2-D requirements for category 5e performance. These cables are characterized to 350MHz, Powersum NEXT tested. 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 5e
- ANSI/TIA-568-C.2 Category 5e
- ISO/IEC 11801:2017 class D
- EN 50173-1 Category 5e
- EN 50288-3-1
- UL 444, NEC 800
- ICEA S-90-661 Category 5e
- NEMA WC 63.1
- 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>	24 AWG
<b>Insulation</b>	<b>Material</b>	High-Density Polyethylene (HDPE)
	<b>Diameter</b>	0.90 ±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>Drop Wire (Messenger Wire)</b>	<b>Material</b>	Galvanize Steel Wire
	<b>Diameter</b>	1.30 ± 0.1mm.
<b>Ripcord</b>		Under Jacket
<b>Jacket</b>	<b>Material</b>	UV-Proof, PE
	<b>Thickness</b>	0.51 ±0.02 mm
	<b>Color</b>	Black
<b>Cable Diameter</b>		5.5 ±0.2 mm
<b>Overall Diameter</b>		9.3 ±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 350 MHz
<b>Mutual Capacitance</b>	≤ 5.6 nF Max / 100m
<b>Capacitance, Unbalance</b>	≤ 160 pF Max / 100m
<b>DC Resistance</b>	≤ 9.38ohm Max./100m
<b>DC Resistance, Unbalance</b>	≤ 2% 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 @350MHz
<b>Delay Skew</b>	≤ 25 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 (>2400PSI)	
<b>Min. Bending Radius</b>	4 X Cable Diameter	
<b>Temperature</b>	<b>Installation/Operation</b>	-40°C to 75°C
	<b>Storage</b>	-40°C to 80°C



## PERFORMANCE CHARACTERISTIC (meet or exceed ANSI/TIA-568.2-D Category 5e)

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	82	77.2	80.2	77	79	75.2	77.2	70	73	67	69	-	-
1	2		77	80	75	78.3	75	77	73	75.3	68	71	65	67	20	28
4	3.8		68	71	64.2	67.5	66	68	62.2	64.5	56	59	53	55	23	31
8	5.3		64	67	58.7	61.4	62	64	56.7	58.4	50	53	47	49	24.5	32.5
10	6		62	65	56	59.3	60	62	54	56.3	48	51	45	47	25	33
16	7.6		59	62	51.4	54.7	57	59	49.4	51.7	44	47	41	43	25	33
20	8.5		58	61	49.5	52.3	56	58	47.5	49.3	42	45	39	41	25	33
25	9.5		56	59	46.5	49.8	54	56	44.5	46.8	40	43	37	39	24.3	32.3
31.25	10.7		55	58	44.3	47.2	53	55	42.3	44.2	38	41	35	37	23.6	31.6
62.5	15.4		50	53	34.6	37.9	48	50	32.6	34.9	32	35	29	31	21.5	29.5
100	19.8		47	50	27.2	30.4	45	47	25.2	27.4	28	31	25	27	20.1	28.1
155	25.3		44	47	18.7	22.1	42	44	16.7	19.1	24	27	21	23	18.8	26.8
200	29		43	46	14	16.6	41	43	12	13.6	22	25	19	21	18	26
250	32.8		41	44	8.2	11.3	39	41	6.2	8.3	20	23	17	19	17.3	25.3
300	36.6		40	43	3.4	6.5	38	40	1.4	3.5	18	21	15	17	16.8	24.8
350	40		39	42	-	2.1	37	39	-	-	17	20	14	16	16.3	24.3

## Applications

- 2.5G BASE-T (IEEE 802.3bz)
- 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-9015M	CAT5e UTP PE Outdoor w/Drop wire (350MHz), 24AWG	Black	305 m	Reel in Box.
US-9015M-1	CAT5e UTP PE Outdoor w/Drop wire (350MHz), 24AWG	Black	100 m	Reel in Box.

\*Other jacket color available on request

Specifications subject to change without notice.

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