



## PRODUCT DESCRIPTION

Category 5e Outdoor with messenger ideal for voice, video and security communications for outdoor applications. Manufactured to the highest standards and approved by organizations such as ETL and when compared to TIA guidelines it meets or surpasses in all categories. It has 24-gauge solid bare copper conductors organized into four color coded twisted pairs surrounded by a protective skin enabling its use for outdoor weather and UV protection and an exterior high strength steel wire (messenger) used as a supporting element. Easy to use during installations and pulls smoothly with no kinks.

## USAGE & ENVIRONMENTAL CONDITION

Temperature Range	Storage & shipping	-20°C to 75°C
	Installation	-10°C – +50°C
	Operation	-40°C – +60°C
Breaking Strength	2000N	
Maximum Pulling Tension	1500N	

## APPLICATIONS

- Structured cabling for horizontal and building backbone cable.
- Transmission of digital and analog for data, video and audio applications.
- IEEE 802.3u 100BASE-T and legacy speeds.
- CDDI / ATM / Token Ring
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)

## PERFORMANCE COMPLIANCE

- Meets ANSI/EIA/TIA 568-B.2 requirements
- Fire Protection – CMX
- Meets UL 444 UL 1581 fire safety standard

## PHYSICAL & ELECTRICAL CHARACTERISTICS

Conductor Resistance at 20°C	9.38 Ohm/100m (2.9 Ohm/100ft)
DC Resistance Unbalance	5%
Pair-to-Ground Capacitance Unbalance	330 pF/100 m (101 pF/100 ft)
Impedance 0.772-100 MHz	85-115 Ohm
Mutual Capacitance	5.6 nF/m (1.7)
nF/ft) Spark Test	2.5 kV

## FEATURES

- High performance of transmission
- High quality of safety property
- Meets/exceeds ANSI/TIA-568-C.2 specification
- Meets ISO/IEC 11801 (Edition2.2)
- Meets IEC 61156-5 (Edition2.0)
- Quick Count marking system in feet
- Outdoor applications



## ELECTRICAL PERFORMANCE COMPARISON (At 20 °C)

Frequency (MHz)	RETURN LOSS		NEXT		PS.NEXT		ACR	
	TIA-568-C.2	Hyperline	TIA-568-C.2	Hyperline	TIA-568-C.2	Hyperline	TIA-568-C.2	Hyperline
	Max. dB/100m	Max. dB/100m	Max. dB/100m	Max. dB/100m	Max. dB/100m	Max. dB/100m	Max. dB/100m	Max. dB/100m
1	20.0	20.0	65.3	65.3	62.3	62.3	63.8	63.8
4	23.0	23.0	56.3	56.3	53.3	53.3	51.7	51.7
8	24.5	24.5	51.8	51.8	48.8	48.8	45.7	45.7
10	25.0	25.0	50.3	50.3	47.3	47.3	43.8	43.8
16	25.0	25.0	47.2	47.3	44.3	44.3	39.7	39.7
20	25.0	25.0	45.8	45.8	42.8	42.8	37.7	37.7
25	24.3	24.3	44.3	44.3	41.3	41.3	35.8	35.8
31.25	23.6	23.6	42.9	42.9	39.9	39.9	33.9	33.9
62.5	21.5	21.5	38.4	38.4	35.4	35.4	27.8	27.8
100	20.1	20.1	35.3	35.3	32.3	32.3	23.8	23.8

Frequency (MHz)	INSERTION LOSS		PS.ACRF	
	TIA-568-C.2	Hyperline	TIA-568-C.2	Hyperline
	Max. dB/100m	Max. dB/100m	Max. dB/100m	Max. dB/100m
1	2	2.0	60.8	60.8
4	4.1	4.0	48.8	48.7
8	5.8	5.8	42.7	42.7
10	6.5	6.5	40.8	40.8
16	8.2	8.2	36.7	36.7
20	9.3	9.3	34.8	34.7
25	10.4	10.4	32.8	32.8
31.25	11.7	11.7	30.9	30.9
62.5	17.0	17.0	24.9	24.8
100	22.0	22.0	20.8	20.8



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## MATERIALS & CONSTRUCTION

Conductor	Material	24AWG solid bare copper Elongation: 14% Min	
Insulation (HDPE)	Material of dual layer	Polyolefin (PO)	
	Color code & diameter	Blue & white/blue stripe	0.85 ± 0.02 mm
		Orange & white/orange stripe	0.86 ± 0.02 mm
		Green & white/green stripe	0.87 ± 0.02 mm
		Brown & white/brown stripe	0.87 ± 0.02 mm
Conductive Material	Soft annealed electrolytic copper		
Rip cord	Material	Polyester multi-yarn	
Twisted	Description	Left hand direction	
Assembly	Description	Left hand direction	
Jacket	Material	PE	
	Conductor Diameter	0.51 mm (0.02") (24 AWG)	
	Insulated Conductor Diameter	0.036" ± 0.001" (0.92 ± 0.02)	
	Outer Cable Diameter	0.24" ± 0.008" (6.2 ± 0.2 mm)	
	Messenger Diameter	0.049" ± 0.004" (1.25 ± 0.1 mm)	
	Jacket Thickness	0.65 mm (0.025")	
	Color	Per Hyperline standard	
Rip cord	Material	Polyester multi-yarn Break strength of 22lbs (98 N)	
Messenger	Galvanized steel wire		
NRTL Program	ETL Verified		
Marking	Hyperline UTP4-C5E-SOLID- SW-OUTDOOR-40		

## ORDERING

Part Number	Product Description
UTP4-C5E-SOLID-SW-OUTDOOR-40	Category 5e Outdoor with Messenger, UTP, 24 AWG, Black 305 Meter/1000 FT Reel



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