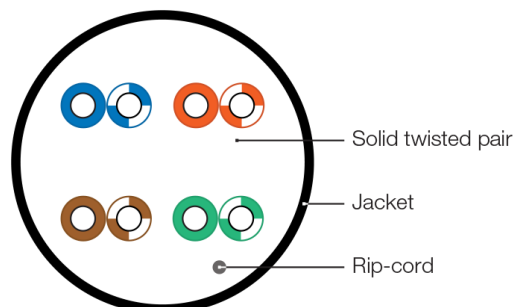
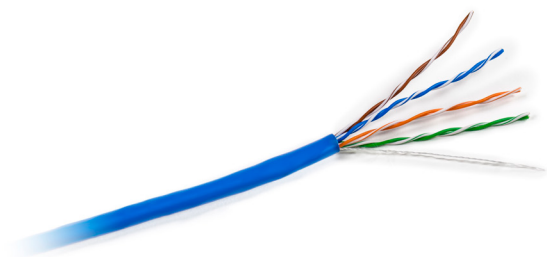




PRODUCT DESCRIPTION

Category 5e Plenum (CMP) ideal for voice, video and security communications medium for your network installation. Manufactured to the highest standards and approved by organizations such as UL and 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 which are insulated with high density polyethylene insulation. With a CMP rated jacket for Plenum rated spaces and Cat 5e CMP cable is easy to use during installations and pulls smoothly with no kinks.

USAGE & ENVIRONMENTAL CONDITION

Temperature range	Storage & shipping	-20°C to 75°C
	Installation	0°C to 60°C
	Operation	-20°C to 60°C
Minimum bending radius	≥ 4 times of overall diameter	
Maximum pulling tension	≤ 110 N	

APPLICATIONS

- Transmission of digital and analogue 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

- ANSI/TIA-568-C.2 (2009)
- ISO/IEC 11801 (Edition 2.2), IEC 61156-5 (Edition 2.0)
- Flame Test - NFPA 262 (CMP)
- UL 444
- EU Directive 2011/65/EC (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

PHYSICAL & ELECTRICAL CHARACTERISTICS

At 20 °C	
Temperature & voltage rating	75°C / 300V
Spark test	2.5 KV DC
AC leakage current through overall jacket	≤ 10mA (1.5KV AC)
Cable cold bend	-20°C for 4 hr
Conductor DC resistance	≤ 9.38 Ω/100m
Resistance unbalance	≤ 5%
Dielectric strength	1.5 KV ac for 2 s
Insulation resistance	≥ 5000 MΩ•m
Mutual capacitance	≤ 5.6 nF/100m
Capacitance unbalance pair-to-ground	≤ 330 pF/100m

FEATURES

- Award winning trademarked packaging
- High performance of transmission
- High quality of safety property
- Sweep frequency up to 350 MHz (Enhanced) verified to 100 MHz
- Meets/exceeds ANSI/TIA-568-C.2 specification
- Meets ISO/IEC 11801 (Edition 2.2)
- Meets IEC 61156-5 (Edition 2.0)
- WideMouth and Reelex carton
- Quick Count marking system in feet

Available in ten different jacket colors



ELECTRICAL PERFORMANCE COMPARISON (At 20 °C)

Frequency (MHz)	INSERTION 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	2.0	2.0	65.3	66.3	62.3	63.3	63.3	63.2
4	4.1	4.0	56.3	57.2	53.3	54.2	52.2	52.2
8	5.8	5.7	51.8	52.7	48.8	49.7	46.0	45.9
10	6.5	6.4	50.3	51.3	47.3	48.3	43.8	43.8
16	8.2	8.2	47.2	48.2	44.3	45.2	39.0	38.9
20	9.3	9.2	45.8	46.7	42.8	43.7	36.5	36.5
25	10.4	10.4	44.3	45.3	41.3	42.3	33.9	33.9
31.25	11.7	11.7	42.9	43.8	39.9	40.8	31.2	31.1
62.5	17.0	16.9	38.4	39.3	35.4	36.3	21.4	21.3
100	22.0	21.9	35.3	36.3	32.3	33.3	13.3	13.3
155		27.5		33.6		30.6		5.1
200		32.4		31.7		28.7		N.A.
250		36.8		30.3		27.3		N.A.
300		40.9		29.1		26.1		N.A.
350		44.8		28.1		25.1		N.A.

Frequency (MHz)	PS.ACR		ACRF		PS.ACRF		RETURN LOSS	
	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	60.3	60.2	63.8	63.8	60.8	60.8	20.0	20.0
4	49.2	49.2	51.8	51.7	48.8	48.7	23.0	23.0
8	43.0	42.9	45.7	45.7	42.7	42.7	24.5	24.5
10	40.8	40.8	43.8	43.8	40.8	40.8	25.0	25.0
16	36.1	35.9	39.7	39.7	36.7	36.7	25.0	25.0
20	33.5	33.5	37.8	37.7	34.8	34.7	25.0	25.0
25	30.9	30.9	35.8	35.8	32.8	32.8	24.3	24.3
31.25	28.2	28.1	33.9	33.9	30.9	30.9	23.6	23.6
62.5	18.4	18.3	27.9	27.8	24.9	24.8	21.5	21.5
100	10.3	10.3	23.8	23.8	20.8	20.8	20.1	20.1
155		2.1		20.2		17.2		18.8
200		N.A.		17.7		14.7		18.0
250		N.A.		15.8		12.8		17.3
300		N.A.		14.2		11.2		16.7
350		N.A.		12.		9.9		16.3

Values above 100 MHz are for information only



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MATERIALS & CONSTRUCTION

Conductor	Material	24AWG solid bare copper	
Insulation	Material	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
Twisted	Description	Left hand direction	
Filler	Material	Polyolefin (PO)	
Assembly	Description	Left hand direction	
Jacket	Material	Low smoke flame retardant polyvinyl chloride (LSFRPVC)	
	Diameter	4.5 ± 0.2 mm	
	Thickness	0.38 ± 0.03 mm	
	Color	Per Hyperline standard	
Rip cord	Material	Polyester multi-yarn	
Nominal Velocity of Propagation	(NVP) 72%		
NRTL Program	c(UL)us listed CMP ETL Verified		
Marking	HYPERLINE UTP4-C5E-SOLID-CMP-XX E303448-F U/UTP 4PR 24AWG C(UL)US CMP --- CSA 269549 CMP UTP 4P 24AWG 75°C – ETL VERIFIED TO ANSI/TIA-568-C.2 CAT 5E 350MHz PO# XXXXXX WW/YY XXXFT-A		

ORDERING

Part Number	Product Description
UTP4-C5E-SOLID-CMP-WH-305	Category 5E Plenum, UTP, 24 AWG, White 305 Meter/1000 FT Pull Box
UTP4-C5E-SOLID-CMP-BL-305	Category 5E Plenum, UTP, 24 AWG, Blue 305 Meter/1000 FT Pull Box
UTP4-C5E-SOLID-CMP-GY-305	Category 5E Plenum, UTP, 24 AWG, Grey 305 Meter/1000 FT Pull Box
UTP4-C5E-SOLID-CMP-OR-305	Category 5E Plenum, UTP, 24 AWG, Orange 305 Meter/1000 FT Pull Box
UTP4-C5E-SOLID-CMP-GN-305	Category 5E Plenum, UTP, 24 AWG, Green 305 Meter/1000 FT Pull Box
UTP4-C5E-SOLID-CMP-VT-305	Category 5E Plenum, UTP, 24 AWG, Violet 305 Meter/1000 FT Pull Box
UTP4-C5E-SOLID-CMP-BK-305	Category 5E Plenum, UTP, 24 AWG, Black 305 Meter/1000 FT Pull Box
UTP4-C5E-SOLID-CMP-YL-305	Category 5E Plenum, UTP, 24 AWG, Yellow 305 Meter/1000 FT Pull Box
UTP4-C5E-SOLID-CMP-RD-305	Category 5E Plenum, UTP, 24 AWG, Red 305 Meter/1000 FT Pull Box
UTP4-C5E-SOLID-CMP-PK-305	Category 5E Plenum, UTP, 24 AWG, Pink 305 Meter/1000 FT Pull Box



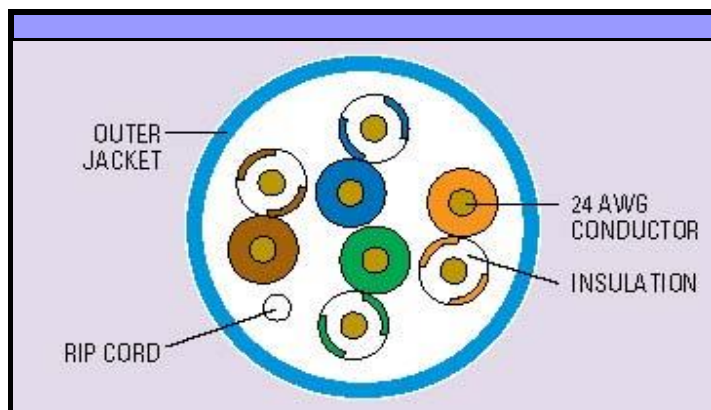
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Category 5E UTP 350MHz Plenum Enhanced



Description

24 AWG Cat 5E Plenum, High Performance Data Cable

Applicable Standards

- UL Listed Type CMP
- C(UL) listed FT6
- UL Verified to TIA - 568-C.2, and ISO/IEC 11801
- ROHS Compliant
- ATM 155 Mbps
- Ethernet 10BASE-T, 100BASE-TX, 100BASE-VG, 100BASE-T4,
- 1000 Mbps 1000BASE-T Gigabit Ethernet™ (IEEE 802.3)
- 16 Mbps Token Ring™ (IEEE 802.5)

Physical Characteristics

Number of Conductor Pairs	4
Size	24 AWG
Stranding	Solid
Conductor Material	Solid Annealed Bare Copper
Shield Material	Unshielded
Rip Cord	Yes
Insulation Material	Polymer Alloy (FEP)
Insulation Overall Diameter	0.035 in. ± 0.0002 in.
Insulation Average Thickness	0.0078 in.
Jacket	Flame Retardant PVC
Outer Jacket Average Wall Thickness	0.019 in.
Outer Jacket Nom. O.D.	0.200 in. ± 0.008 in.
Nominal Weight	21 lbs

Mechanical Characteristics

Temperature Rating	Installation	0 to + 60°C
	Operating	-20°C to + 75°C
Tensile Strength	Before	> = 13.8 Mpa
Elongation	Aging	> = 100%
Aging Condition		100°C x 240 hours
	After	> = 85% of unaged
	Aging	> = 50% of unaged

Color Code

Pair 1	White/Blue	Blue
Pair 2	White/Orange	Orange
Pair 3	White / Green	Green
Pair 4	White / Brown	Brown

Cable Marking

XXXXXX CATEGORY 5E 350MHZ 24AWG 4PR UTP CMP 75C FT6
C(UL)US VERIFIED (ETL) ANSI/TIA-568-C.2 ****FT

Electrical Performance

Frequency (MHz)	Attenuation (dB/100m)		Return loss (dB)		NEXT (dB)		PS-NEXT (dB)	
	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.
0.772	1.8	1.5	23.0	33.0	72.0	81.1	70.0	78.7
1	2.0	1.8	23.0	38.6	70.3	79.4	68.3	76.9
4	4.1	3.6	23.0	39.8	61.2	69.9	59.3	67.4
8	5.8	5.1	24.5	38.2	56.8	61.9	54.8	59.4
10	6.5	5.8	25.0	38.0	55.3	62.4	53.5	59.9
16	8.2	7.4	25.0	37.4	52.3	57.8	50.3	55.2
20	9.3	8.2	25.0	36.8	50.8	56.4	48.8	53.8
25	10.4	9.3	24.3	35.2	49.3	56.3	47.3	53.6
31.25	11.7	10.5	23.6	33.3	47.9	53.8	45.9	51.1
62.5	17.0	14.9	21.5	32.2	43.4	49.8	41.4	47.4
100	22.0	19.2	20.1	31.3	40.3	47.5	38.3	45.0
155	28.1	24.2	18.8	29.8	37.4	45.1	35.4	42.6
200	32.4	27.3	18.0	28.5	35.7	43.3	33.7	40.2
250	38.9	30.9	17.5	27.3	34.8	41.4	32.5	39.0
300	41.0	34.1	16.8	25.6	33.1	40.2	31.1	37.7
350	44.9	37.8	16.3	23.2	32.1	39.0	30.1	36.5

Frequency (MHz)	ELFEXT (dB)		PS-ELFEXT (dB)		ACR (dB)		PS-ACR (dB)	
	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.
0.772	66.0	73.3	63.0	72.7	70.2	79.2	68.2	77.0
1	63.8	71.3	60.8	70.6	68.2	77.6	66.3	75.0
4	51.7	59.4	48.7	58.7	57.2	66.3	55.2	63.5
8	45.7	53.2	42.7	51.1	51.0	59.8	49.0	56.9
10	43.8	50.5	40.8	49.7	48.8	56.6	47.0	53.7
16	39.7	47.0	36.7	45.1	43.0	53.0	42.1	47.4
20	39.7	45.0	34.7	43.6	41.5	50.5	39.5	45.0
25	35.8	43.3	32.8	42.0	38.9	47.0	36.9	43.7
31.25	33.9	41.3	30.9	40.5	36.5	43.3	34.2	40.0
62.5	27.8	35.8	24.8	34.5	26.4	35.0	24.4	31.2
100	23.8	31.3	20.8	30.3	18.3	26.2	16.3	24.2
155	19.9	27.5	16.9	26.9	10.0	20.9	7.3	15.9
200	17.7	24.7	14.7	24.5	5.0	16.0	2.0	10.0
250	17.1	22.2	14.0	22.5	0.0	10.6	-	4.0
300	16.7	20.5	13.5	20.7	-	6.1	-	-1.3
350	16.0	19.4	12.8	19.6	-	1.2	-	-6.4

* Values above 100MHz are information only

Electrical Characteristics

Maximum Conductor DC Resistance @ 20°C	9.38 Ω / 100 Meters
Maximum DC Resistance Unbalanced @ 20°C	5%
Maximum Pair-to-Pair Ground Capacitance Unbalanced	330 pF / 100 Meters
Characteristic Impedance (1 ~ 350 MHz)	100 ± 15 Ω
Mutual Capacitance	5.6 nF / 100 Meters
Maximum Delay Skew	40 nS / 100 Meters

Part Numbers

Part Numbers	Color	Put up	Part Numbers	Color	Put up
5E04UPBL4	Blue	1,000' Reelex II	5E04UPBL3	Blue	1,000' RIB
5E04UPGN4	Green	1,000' Reelex II	5E04UPGN3	Green	1,000' RIB
5E04UPGY4	Grey	1,000' Reelex II	5E04UPGY3	Grey	1,000' RIB
5E04UPOR4	Orange	1,000' Reelex II	5E04UPOR3	Orange	1,000' RIB
5E04UPWH4	White	1,000' Reelex II	5E04UPWH3	White	1,000' RIB
5E04UPYL4	Yellow	1,000' Reelex II	5E04UPYL3	Yellow	1,000' RIB
5E04UPBK4	Black	1,000' Reelex II			