



## PRODUCT DESCRIPTION

Category 6 Plenum (CMP) used in the Plenum spaces in buildings is ideal for voice, data, video and security communication mediums for all your network installation requirements. Manufactured to the highest quality standards and approved by 3rd party organizations such as UL and ETL, Hyperline Cable, when compared to TIA guidelines meets or surpasses the specifications in every category. The cable construction is comprised of 8 x 23-gauge solid bare copper cores, along with a CMP fire-retardant jacket and a rip cord to facilitate easy jacket removal, Hyperline's Cat 6 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

- Structured cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- IEEE 802.3ab 1000BASE-T, 1000BASE-TX and legacy speeds.
- CDDI / ATM / Token Ring
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)

## PERFORMANCE COMPLIANCE

- 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 rating	75°C
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•Km
Mutual capacitance	≤ 5.6 nF/100m
Capacitance unbalance pair-to-ground	≤ 330 pF/100m
Voltage	300V

## FEATURES

- Award winning trademarked packaging
- High performance of transmission
- High quality of safety property
- Sweep frequency up to 400 MHz
- Meets/exceeds ANSI/TIA-568-C.2 specification
- Meets ISO/IEC 11801 (Edition2.2)
- Meets IEC 61156-5 (Edition2.0)
- Flame Test –NFPA 262 (CMP)
- 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	74.3	74.3	72.3	72.3	72.3	72.2
4	3.8	3.7	65.3	65.2	63.3	63.2	61.5	61.4
8	5.3	5.3	60.8	60.7	58.8	58.7	55.4	55.4
10	6.0	5.9	59.3	59.3	57.3	57.3	53.3	53.3
16	7.6	7.5	56.2	56.2	54.2	54.2	48.6	48.6
20	8.5	8.4	54.8	54.7	52.8	52.7	46.3	46.3
25	9.5	9.5	53.3	53.3	51.3	51.3	43.8	43.8
31.25	10.7	10.6	51.9	51.8	49.9	49.8	41.2	41.2
62.5	15.4	15.3	47.4	47.3	45.4	45.3	32.0	31.9
100	19.8	19.8	44.3	44.3	42.3	42.3	24.5	24.5
200	29.0	28.9	39.8	39.7	37.8	37.7	10.8	10.8
250	32.8	32.8		38.3	36.3	36.3	5.5	5.4
300		36.4		37.1		35.1		0.7
350		39.7		36.1		34.1		N.A.
400		42.9		35.2		33.2		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	70.3	70.2	67.8	67.8	64.8	64.8	20.0	20.0
4	59.5	59.4	55.8	55.7	52.8	52.7	23.0	23.0
8	53.4	53.4	49.7	49.7	46.7	46.7	24.5	24.5
10	51.3	51.3	47.8	47.8	44.8	44.8	25.0	25.0
16	46.6	46.6	43.7	43.7	40.7	40.7	25.0	25.0
20	44.3	44.3	41.8	41.7	38.8	38.7	25.0	25.0
25	41.8	41.8	39.8	39.8	36.8	36.8	24.3	24.3
31.25	39.2	39.2	37.9	37.9	34.9	34.9	23.6	23.6
62.5	30.0	29.9	31.9	31.8	28.9	28.8	21.5	21.5
100	22.5	22.5	27.8	27.8	24.8	24.8	20.1	20.1
200	8.8	8.8	21.8	21.7	18.8	18.7	18.0	18.0
250	3.5	3.4	19.8	19.8	16.8	16.8	17.3	17.3
300		N.A.		18.2		15.2		16.7
350		N.A.		16.9		13.9		16.3
400		N.A.		15.7		12.7		15.8

Values above 250MHz are for information only



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## ELECTRICAL SPECIFICATIONS (At 20 °C)

Frequency (MHz)	Propagation Delay	
	TIA-568-C.2	Hyperline
	Max. dB/100m	Max. dB/100m
1	570	570
4	552	552
8	547	546
10	545	545
16	543	543
20	542	542
25	541	541
31.25	540	540
62.5	539	538
100	538	537
200	537	536
250	536	536
300		536
350		535
400		535

Values above 250MHz are for information only

## MATERIALS & CONSTRUCTION

Conductor	Material	23AWG solid bare copper	
Insulation	Material	Fluorinated Ethylene Propylene (FEP)	
	Color code & diameter	Blue & white/blue stripe	0.98 ± 0.02 mm
		Orange & white/orange stripe	0.96 ± 0.02 mm
		Green & white/green stripe	1.00 ± 0.02 mm
		Brown & white/brown stripe	0.95 ± 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	5.1 ± 0.2 mm	
	Thickness	0.38 ± 0.03 mm	
	Color	Per Hyperline standard	



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## MATERIALS & CONSTRUCTION

Rip cord	Material	Polyester multi-yarn
Nominal Velocity of Propagation	(NVP) 72%	
NRTL Program	c(UL)us listed CMP ETL Verified	
Marking	Hyperline UTP4-C6-SOLID-NCR-CMP-XX-305	

## ORDERING

Part Number	Product Description
UTP4-C6-SOLID-CMP-NCR-WH-305	Category 6 Plenum, NCR, UTP, 23 AWG, White 305 Meter/1000 FT Pull Box
UTP4-C6-SOLID-CMP-NCR-BL-305	Category 6 Plenum, NCR, UTP, 23 AWG, Blue 305 Meter/1000 FT Pull Box
UTP4-C6-SOLID-CMP-NCR-GY-305	Category 6 Plenum, NCR, UTP, 23 AWG, Grey 305 Meter/1000 FT Pull Box
UTP4-C6-SOLID-CMP-NCR-OR-305	Category 6 Plenum, NCR, UTP, 23 AWG, Orange 305 Meter/1000 FT Pull Box
UTP4-C6-SOLID-CMP-NCR-GN-305	Category 6 Plenum, NCR, UTP, 23 AWG, Green 305 Meter/1000 FT Pull Box
UTP4-C6-SOLID-CMP-NCR-VT-305	Category 6 Plenum, NCR, UTP, 23 AWG, Violet 305 Meter/1000 FT Pull Box
UTP4-C6-SOLID-CMP-NCR-BK-305	Category 6 Plenum, NCR, UTP, 23 AWG, Black 305 Meter/1000 FT Pull Box
UTP4-C6-SOLID-CMP-NCR-YL-305	Category 6 Plenum, NCR, UTP, 23 AWG, Yellow 305 Meter/1000 FT Pull Box
UTP4-C6-SOLID-CMP-NCR-RD-305	Category 6 Plenum, NCR, UTP, 23 AWG, Red 305 Meter/1000 FT Pull Box
UTP4-C6-SOLID-CMP-NCR-PK-305	Category 6 Plenum, NCR, UTP, 23 AWG, Pink 305 Meter/1000 FT Pull Box



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