



PRODUCT DESCRIPTION

Category 6 Riser (CMR) 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, which are then insulated with high density polyethylene insulation and organized into four color coded twisted pair sets of conductors. Along with a CMR rated jacket and a rip cord to facilitate easy jacket removal, Hyperlines Cat 6 CMR cable is easy to use during installations and pulls smoothly with no kinks.

APPLICATIONS

- 10BASE-T through 1000BASE-T Ethernet
- Power over Ethernet (PoE) – IEEE 802.3af
- PoE+ – IEEE 802.3at Type 1 and 2
- Wi-Fi – IEEE 802.11a/b/g/n

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

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	

PERFORMANCE COMPLIANCE

- UL 444
- EU Directive 2011/65/EC (RoHS2)
- EU Directive 2006/95/EC (LVD)

FEATURES

- Award winning trademarked packaging
- High performance of transmission
- High quality of safety property
- Sweep frequency up to 550 MHz (Enhanced) verified to 250 MHz
- Meets/exceeds ANSI/TIA-568-C.2 specification
- Meets ISO/IEC 11801 (Edition2.2)
- Meets IEC 61156-5 (Edition2.0)
- Flame Test –UL 1666 (CMR)
- Wide-mouth and Reelex carton
- Quick Count marking system in feet
- Lower cross talk

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	79.3	72.3	77.3	72.3	77.3
4	3.8	3.7	65.3	70.3	63.3	68.3	61.5	66.5
8	5.3	5.3	60.8	65.8	58.8	63.7	55.4	60.4
10	6.0	5.9	59.3	64.3	57.3	62.3	53.3	58.3
16	7.6	7.4	56.2	61.2	54.2	59.2	48.6	53.6
20	8.5	8.3	54.8	59.8	52.8	57.8	46.3	51.3
25	9.5	9.3	53.3	58.3	51.3	56.3	43.8	48.8
31.25	10.7	10.4	51.9	56.9	49.9	54.9	41.2	46.2
62.5	15.4	15.0	47.4	52.4	45.4	50.4	32.0	37.0
100	19.8	19.3	44.3	49.3	42.3	47.3	24.5	29.5
155	25.2	24.6	41.4	46.7	39.4	44.7	16.3	21.9
200	29.0	28.3	39.8	44.8	37.8	42.8	10.8	15.8
250	32.8	31.1	38.3	43.3	36.3	41.3	5.5	10.5
300		34.6		42.1		40.1		7.5
400		40.6		40.3		38.3		NA
550		48.5		38.2		36.2		NA

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	75.3	67.8	67.8	64.8	64.8	20.0	20.0
4	59.5	64.5	55.8	55.7	52.8	52.7	23.0	23.6
8	53.4	58.4	49.7	49.7	46.7	46.7	24.5	24.5
10	51.3	56.3	47.8	47.8	44.8	44.8	25.0	26.0
16	46.6	51.6	43.7	43.7	40.7	40.7	25.0	26.0
20	44.3	49.3	41.8	41.7	38.8	38.7	25.0	26.0
25	41.8	46.8	39.8	39.8	36.8	36.8	24.3	25.3
31.25	39.2	44.2	37.9	37.9	34.9	34.9	23.6	25.0
62.5	30.0	35.0	31.9	31.8	28.9	28.8	21.5	23.5
100	22.5	27.5	27.8	27.8	24.8	24.8	20.1	22.5
155	14.3	19.9	24.3	24.2	21.3	21.2	18.8	21.6
200	8.8	13.8	21.8	21.7	18.8	18.7	18.0	21.0
250	3.5	8.5	19.8	19.8	16.8	16.8	17.3	20.5
300		5.5		18.2		15.2		16.8
400		NA		15.7		12.7		15.9
550		NA		12.9		9.9		14.9



MATERIALS & CONSTRUCTION

Conductor	Material	23AWG solid bare copper	
Insulation	Material	Polyolefin (PO)	
	Color code & diameter	Blue & white/blue stripe	1.02 ± 0.02 mm
		Orange & white/orange stripe	0.98 ± 0.02 mm
		Green & white/green stripe	1.02 ± 0.02 mm
		Brown & white/brown stripe	0.98 ± 0.02 mm
Twisted	Description	Left hand direction	
Filler	Material	Polyolefin (PO)	
Assembly	Description	Left hand direction	
Jacket	Material	Flame retardant polyvinyl chloride (FRPVC) or Polyethylene (PE)	
	Diameter	6.0 ± 0.2 mm	
	Thickness	0.50 ± 0.05 mm	
	Color	Per Hyperline standard	
Rip cord	Material	Polyester multi-yarn	
Nominal Velocity of Propagation	(NVP) 69%		
NRTL Program	c(UL)us listed CMR ETL Verified CSA Verified		
Marking	Hyperline UTP4-C6-SOLID-CMR-XX--- E303448 U/UTP 4PR 23AWG C(UL)US CMR--- CSA 253831 CMR UTP 4P 23AWG 75°C -- ETL VERIFIED TO ANSI/TIA-568-C.2 CAT 6E 550MHz PO# XXXXXX WW/YY XXXXFT-A		

ORDERING

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



Toll Free: +1-866-634-9737

www.hyperline.com | info@hyperline.com



Toll Free: +1-888-497-3748