

# Category 6A UTP 10G Riser (CMR) Cable



Cable Detail			
Description			
23 AWG CAT6A CMR, High-Performance Data Cable			
Applicable Standards			
<ul style="list-style-type: none"> <li>• UL Verified Type CMR</li> <li>• C(UL) listed FT4</li> <li>• ANSI/TIA-568-C.2</li> <li>• ISO/IEC 11801</li> <li>• RoHS Compliant</li> <li>• ATM 155 Mbps</li> <li>• 10/100/1000/10G Base-T (IEEE 802.3)</li> <li>• 4/16 Mbps Token Ring™ (IEEE 802.5)</li> <li>• 100 Mbps TP-PMD</li> <li>• ISDN, ADSL</li> <li>• ATM LAN 1.2G</li> <li>• Horizontal Distribution &amp; Backbone Cabling</li> </ul>			
Physical Characteristics			
Conductor Material	Solid Annealed Bare Copper		
Number of Conductor Pairs	4		
Size	23 AWG		
Stranding	Solid		
Insulation Material	HDPE		
Overall Diameter	0.315 in. ± 0.0002 in.		
Average Thickness	0.0086 in		
Jacket Material	Flame Retardant PVC		
Average Wall Thickness	0.022 in.		
Nominal Outer Diameter	0.3 in. ± 0.008 in.		
Nominal Weight	38 lbs.		
Shield Material	Unshielded		
Ripcord	Yes		
Mechanical Characteristics			
Temperature Rating	Installation	0°C to + 60°C	
	Operating	-20°C to + 75°C	
Tensile Strength	Before	≥ 13.8 Mpa	
Elongation	Aging	≥ 100%	
		100°C x 168 hours	
	After	≥ 85% of unaged	
	Aging	≥ 50% of unaged	
Insulation Colors			
Pair 1	White / Blue	Blue	
Pair 2	White / Orange	Orange	
Pair 3	White / Green	Green	
Pair 4	White / Brown	Brown	
Part Numbers	Jacket Color	Package	
<b>6A04URXX2</b>	Blue, White, Green, Grey, Yellow, Red	1000FT / Reel	

## Electrical Characteristics

Max. Conductor DC Resistance @ 20°C	6.85 Ω / 100 Meters
Maximum DC Resistance Unbalanced @ 20°C	5%
Max. Pair-to-Pair Ground Capacitance Unbalance	330 pF / 100 Meters
Characteristic Impedance (1 ~ 350 MHz)	100 ± 15 Ω
Mutual Capacitance	5.6 nF / 100 Meters
Max. Delay Skew	40 nS / 100 Meters
Nominal Velocity of Propagation	65%

## Electrical Performance

Frequency (MHz)	Attenuation (dB/100m) Max.	Return loss (dB) Min.	NEXT (dB) Min.	PS-NEXT (dB) Min.
1	2.08	20.00	74.30	72.30
4	3.80	23.01	65.27	63.27
8	5.31	24.52	60.75	58.75
10	5.93	25.00	59.30	57.30
16	7.49	25.00	56.24	54.24
20	8.38	25.00	54.78	52.78
25	9.38	24.32	53.33	51.33
31.25	10.50	23.64	51.88	49.88
62.5	14.99	21.54	47.36	45.36
100	19.14	20.11	44.30	42.30
200	27.58	18.00	39.78	37.78
250	31.07	17.32	38.33	36.33
300	34.27	16.77	37.14	35.14
400	40.05	15.89	35.27	33.27
500	45.26	15.21	33.82	31.82
600	50.05	14.66	32.63	30.63
625	51.20	14.54	32.36	30.36
650	52.33	14.42	32.11	30.11
700	54.53	14.19	31.62	29.62
750	56.68	13.98	31.17	29.17
Frequency (MHz)	ELFEXT (dB/100m) Min.	PS-ELFEXT (dB) Min.	PS-ANEXT (dB/100m)	PS-AELFEXT (dB/100m)
1	67.80	64.80	67.00	67.00
4	55.76	52.76	67.00	66.16
8	49.74	46.74	67.00	60.14
10	47.80	44.80	67.00	58.20
16	43.72	40.72	67.00	54.12
20	41.78	38.78	67.00	52.18
25	39.84	36.84	67.00	50.24
31.25	37.90	34.90	67.00	48.30
62.5	31.88	28.88	65.56	42.28
100	27.80	24.80	62.50	38.20
200	21.78	18.78	57.98	32.18
250	19.84	16.84	56.53	30.24
300	18.26	15.26	55.34	28.66
400	15.76	12.76	53.47	26.16
500	13.82	10.82	52.02	24.22
600	12.24	9.24	50.83	22.64
625	11.88	8.88	50.56	22.28
650	11.54	8.54	50.31	21.94
700	10.90	7.90	49.82	21.30
750	10.30	7.30	49.37	20.70

\*Values above are for reference only.

## Cable Marking

EXXXXXXX 23AWG 4 PR UTP CMR 75C FT4 C(UL)US VERIFIED (UL)  
CATEGORY 6A ANSI/TIA-568.C.2 \*\*\*\*\*FT