

# Category 5E 350MHz UTP Riser (CMR) Cable

Cable Detail		
Description		
24 AWG Cat5E CMR, High-Performance Data Cable		
Applicable Standards		
<ul style="list-style-type: none"> <li>• ETL Listed Type CMR</li> <li>• C(ETL) listed CMG FT4</li> <li>• ETL Verified to TIA-568-C.2</li> <li>• ISO/IEC 11801</li> <li>• RoHS Compliant</li> <li>• ATM 155 Mbps</li> <li>• Ethernet 10BASE-T, 100BASE-TX, 100BASE-VG, 100BASE-T4</li> <li>• 1000 Mbps 1000BASE-T Gigabit Ethernet™ (IEEE 802.3)</li> <li>• 16 Mbps Token Ring™ (IEEE 802.5)</li> </ul>		
Physical Characteristics		
Conductor Material	Solid Annealed Bare Copper	
Number of Conductor Pairs	4	
Size	24 AWG	
Stranding	Solid	
Insulation Material	Polyethylene	
Overall Diameter	0.035 in. ± 0.0002 in	
Average Thickness	0.0081 in	
Jacket Material	Flame Retardant PVC	
Average Wall Thickness	0.023 in.	
Nominal Outer Diameter	0.200 in. ± 0.008 in.	
Nominal Weight	20 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%
	Aging Condition	100°C x 240 hours
		After
	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>5E04URXX4</b>	Black, Blue, Green, Grey, Orange, Pink, Purple, Red, White, Yellow	1000FT / Reel

## Electrical Characteristics

Max. Conductor DC Resistance @ 20°C	9.65 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

## 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/100m)		PS-ELFEXT (dB)		ACR Typ (dB)		PS-ACR Typ (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	37.7	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.

## Cable Marking

CATEGORY 5E 350MHZ 24AWG 4 PR UTP XXXXXX CMR FT4 C(ETL)US  
ETL LISTED & VERIFIED TO TIA-568-C.2 \*\*\*\*FT