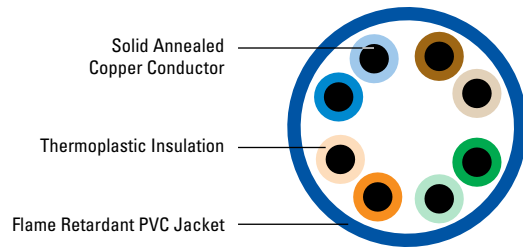


# Cobra Category 5e+ CMR/CMP



## Specifications

<b>Pair Count</b>	4
<b>Conductor</b>	Solid annealed copper
<b>AWG (mm)</b>	24 (0.51)
<b>Insulation</b>	CMR: Polyolefin CMP: FEP
<b>Insulation Colors</b>	Pair 1: ColorTip™ Light Blue, Blue Pair 2: ColorTip Light Orange, Orange Pair 3: ColorTip Light Green, Green Pair 4: ColorTip Light Brown, Brown
<b>Jacket</b>	CMR: Flame retardant (FR) PVC CMP: FR, low smoke PVC
<b>Characteristic Impedance (Ohms)</b>	100 ± 15
<b>Nominal Velocity of Propagation (%)</b>	CMR: 70 CMP: 74
<b>Performance Compliance</b>	UL 444 UL 1666 NFPA 262 ANSI/TIA-568-C.2 ANSI/ICEA S-90-661-2002 RoHS-compliant
<b>NRTL Programs</b>	UL Verified CAT 5e UL Listed CMR UL Listed CMP

## Product Description

Cobra Category 5e+ cable is the performance leader in its class. Cobra cable is ideal for installations that require true “future proofing” in channel performance. By design, Cobra cables are manufactured to the highest quality standards, design requirements and materials to ensure that every box provides significant margin over ANSI/TIA-568-C.2 specifications for NEXT, Power Sum NEXT and Insertion Loss.

## Applications

- 10BASE-T through 1000BASE-T ethernet
- ATM and token ring

## Features

- Guaranteed NEXT of 3 dB greater than ANSI/TIA-568-C.2 specification across frequency range
- Guaranteed ACR of 19.5 dB at 100 MHz
- Exceptional PSNEXT, PSELFEXT and PS-ACR over CAT 5e
- “WideMouth” POP™ Box design
- QuickCount® marking system in feet and meters
- ColorTip™ circuit identification system
- Color coded box labels

## Benefits

- Greater assurance of exceptional overall channel performance
- Performance assurance for multiple high-bandwidth applications
- Reduces BER, improving network efficiency
- Reduces tension on wire to ensure proper electrical performance after installation
- Provides remaining length of cable on reel
- Easily identifiable conductor mates even in low light environments
- Easily identifies jacket colors

## Part Numbers and Physical Characteristics

Listing	Part Number <sup>1</sup>	Nominal Diameter in (mm)	Approx. Weight lbs/kft (kg/km)	Package	Packages Per Pallet
CMR	52-200-x5	0.19 (4.8)	19 (28)	1,000' Reel-in-a-Box	45
CMR	52-240-x5	0.19 (4.8)	19 (28)	1,000' POP™ Box	36
CMP	52-200-x8	0.19 (4.8)	21 (31)	1,000' Reel-in-a-Box	45
CMP	52-241-x8	0.19 (4.8)	21 (31)	1,000' POP™ Box	45

## Jacket Colors

'Replace “x” with:	Blue = 2	Gray = 3	White = 4	Green = 5	Yellow = 6	Purple = 7	Red = 9	Brown = B	Orange = D	Black = E
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Electrical Specifications												
Frequency MHz	Insertion Loss @ 20°C Maximum dB/100 m			NEXT Minimum dB/100 m			ACR Minimum dB/100 m			PSNEXT Minimum dB/100 m		
	TIA-568-C.2	Superior Essex		TIA-568-C.2	Superior Essex		TIA-568-C.2	Superior Essex		TIA-568-C.2	Superior Essex	
	Specified	Guaranteed	Typical	Specified	Guaranteed	Typical	Calculated	Guaranteed	Typical	Specified	Guaranteed	Typical
0.772	1.8	1.8	1.6	67.0	70.0	81.1	65.2	69.3	84.0	64.0	68.0	78.7
1	2.0	2.0	1.8	65.3	68.3	79.5	63.3	67.4	77.7	62.3	66.3	77.2
4	4.1	4.0	3.6	56.3	59.3	69.9	52.2	56.4	66.4	53.3	57.3	67.5
8	5.8	5.7	5.1	51.8	54.8	65.1	46.0	50.3	60.0	48.8	52.8	62.7
10	6.5	6.4	5.8	50.3	53.3	63.6	43.8	48.2	57.9	47.3	51.3	61.2
16	8.2	8.1	7.4	47.2	50.3	60.4	39.0	43.4	53.1	44.2	48.3	58.0
20	9.3	9.2	8.3	45.8	48.8	59.0	36.5	41.0	50.9	42.8	46.8	56.6
25	10.4	10.3	9.3	44.3	47.3	57.5	33.9	38.5	48.3	41.3	45.3	55.1
31.25	11.7	11.6	10.4	42.9	45.9	56.0	31.2	35.8	45.7	39.9	43.9	53.5
62.5	17.0	16.8	14.9	38.4	41.4	51.7	21.4	26.2	36.8	35.4	39.4	49.2
100	22.0	21.7	19.1	35.3	38.3	48.5	13.3	21.0	29.5	32.3	36.3	46.0
155		27.7	24.2		35.5	45.7		9.3	21.6		33.5	43.1
200		32.1	27.8		29.8	43.6		3.5	16.0		27.8	41.0
250		36.5	31.4		28.3	42.0			10.7		26.3	39.4
300		40.5	34.7		27.2	40.4			5.9		25.2	37.9
350		44.4	37.7		26.2	39.3			1.7		24.2	36.8

Frequency MHz	PS-ACR Minimum dB/100 m			Return Loss Minimum dB/100 m			ELFEXT Minimum dB/100 m			PSELFEXT Minimum dB/100 m		
	TIA-568-C.2	Superior Essex		TIA-568-C.2	Superior Essex		TIA-568-C.2	Superior Essex		TIA-568-C.2	Superior Essex	
	Calculated	Guaranteed	Typical	Specified	Guaranteed	Typical	Specified	Guaranteed	Typical	Specified	Guaranteed	Typical
0.772	62.2	66.3	86.0	19.4	19.4	26.0	66.0	66.0	77.4	63.0	63.0	79.2
1	60.3	64.4	75.4	20.0	20.0	28.5	63.8	63.8	72.6	60.8	60.8	70.8
4	49.2	53.4	64.0	23.0	23.0	35.6	51.8	51.7	60.7	48.7	48.7	59.0
8	43.0	47.3	57.7	24.5	24.5	35.7	45.7	45.7	54.8	42.7	42.7	53.1
10	40.8	45.2	55.6	25.0	25.0	35.9	43.8	43.8	52.9	40.8	40.8	51.1
16	36.0	40.4	50.8	25.0	25.0	35.2	39.7	39.7	48.9	36.7	36.7	47.1
20	33.5	38.0	48.6	25.0	25.0	34.9	37.8	37.7	47.0	34.7	34.7	45.2
25	30.9	35.5	46.0	24.3	24.3	35.3	35.8	35.8	45.1	32.8	32.8	43.3
31.25	28.2	32.8	43.4	23.6	23.6	34.8	33.9	33.9	43.2	30.9	30.9	41.3
62.5	18.4	23.2	34.6	21.5	21.5	31.8	27.9	27.8	37.2	24.8	24.8	35.2
100	10.3	18.0	27.3	20.1	20.1	30.1	23.8	23.8	33.2	20.0	20.8	31.1
155		6.3	19.4		18.8	28.4		19.9	29.3		16.9	27.2
200		0.5	13.9		18.0	27.3		11.7	27.1		10.7	25.0
250			8.6		17.3	26.1		9.8	25.1		8.8	23.1
300			3.8		16.8	25.1		8.2	23.7		7.2	21.5
350					16.3	24.0		6.9	22.5		5.9	20.3