

# Cobra Category 5e+ CMR/CMP



## Product Description

Cobra Category 5e+ cable is the performance leader in its class. With enough headroom to greatly exceed TIA/EIA 568-B.2 specifications, 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 which ensure that every box provides significant margin over TIA/EIA 568-B.2 specifications for NEXT, Power Sum NEXT and Attenuation. Outstanding guaranteed and typical performance sets Cobra far apart from common CAT 5e cables.

## Features

- Guaranteed NEXT of 3 dB greater than TIA/EIA 568-B.2 specification across frequency range
- Guaranteed ACR of 19.5 dB at 100MHz
- Exceptional PS NEXT, PS ELFEXT and PS ACR over Category 5e
- “WideMouth” POP® Box design
- ColorTip™ circuit identification
- QuickCount® marking 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
- Easily identifiable conductor mates even in low light environments
- Eliminates guess work of footage in box or reel
- Easily identifiable jacket colors

## Applications

- 10BASE-T through 1000BASE-T Ethernet, ATM and Token Ring

### Part Numbers and Physical Characteristics

	Part #	Pair Count	AWG (mm)	Jacket Color	Nom. Dia. inches (mm)	Approx. Weight lbs/kft (kg/km)	Package
<b>CMR</b>	52-200-25	4	24 (0.5)	Blue	0.20 (5.1)	21 (31)	1000' Reel-in-a-Box
	52-200-35	4	24 (0.5)	Gray	0.20 (5.1)	21 (31)	1000' Reel-in-a-Box
	52-200-45	4	24 (0.5)	White	0.20 (5.1)	21 (31)	1000' Reel-in-a-Box
	52-200-65	4	24 (0.5)	Yellow	0.20 (5.1)	21 (31)	1000' Reel-in-a-Box
	52-200-55	4	24 (0.5)	Green	0.20 (5.1)	21 (31)	1000' Reel-in-a-Box
	52-240-25	4	24 (0.5)	Blue	0.20 (5.1)	21 (31)	1000' POP Box
	52-240-35	4	24 (0.5)	Gray	0.20 (5.1)	21 (31)	1000' POP Box
	52-240-45	4	24 (0.5)	White	0.20 (5.1)	21 (31)	1000' POP Box
	52-240-65	4	24 (0.5)	Yellow	0.20 (5.1)	21 (31)	1000' POP Box
	52-240-55	4	24 (0.5)	Green	0.20 (5.1)	21 (31)	1000' POP Box
	52-240-75	4	24 (0.5)	Purple	0.20 (5.1)	21 (31)	1000' POP Box
	52-240-95	4	24 (0.5)	Red	0.20 (5.1)	21 (31)	1000' POP Box
	52-240-D5	4	24 (0.5)	Orange	0.20 (5.1)	21 (31)	1000' POP Box
	52-240-E5	4	24 (0.5)	black	0.20 (5.1)	21 (31)	1000' POP Box
	<b>CMP</b>	52-200-28	4	24 (0.5)	Blue	0.21 (5.3)	23 (34)
52-200-38		4	24 (0.5)	Gray	0.21 (5.3)	23 (34)	1000' Reel-in-a-Box
52-200-48		4	24 (0.5)	White	0.21 (5.3)	23 (34)	1000' Reel-in-a-Box
52-200-68		4	24 (0.5)	Yellow	0.21 (5.3)	23 (34)	1000' Reel-in-a-Box
52-200-58		4	24 (0.5)	Green	0.21 (5.3)	23 (34)	1000' Reel-in-a-Box
52-241-28		4	24 (0.5)	Blue	0.21 (5.3)	23 (34)	1000' POP Box
52-241-38		4	24 (0.5)	Gray	0.21 (5.3)	23 (34)	1000' POP Box
52-241-48		4	24 (0.5)	White	0.21 (5.3)	23 (34)	1000' POP Box
52-241-68		4	24 (0.5)	Yellow	0.21 (5.3)	23 (34)	1000' POP Box
52-241-58		4	24 (0.5)	Green	0.21 (5.3)	23 (34)	1000' POP Box
52-241-78		4	24 (0.5)	Purple	0.21 (5.3)	23 (34)	1000' POP Box
52-241-98		4	24 (0.5)	Red	0.21 (5.3)	23 (34)	1000' POP Box
52-241-D8		4	24 (0.5)	Orange	0.21 (5.3)	23 (34)	1000' POP Box
52-241-E8		4	24 (0.5)	black	0.21 (5.3)	23 (34)	1000' POP Box

## Cobra Category 5e+ CMR/CMP

### Product Description CMR

• Conductor: 24 AWG (0.5 mm) Solid Annealed Bare Copper • Insulation: Thermoplastic • Jacket: Flame Retardant PVC (Polyvinyl Chloride)

### Product Description CMP

• Conductor: 24 AWG (0.5 mm) Solid Annealed Bare Copper • Insulation: Thermoplastic • Jacket: Flame Retardant, Low Smoke PVC (Polyvinyl Chloride)

Electrical												
Frequency MHz	Attenuation (dB/100m) @ 20°C Maximum			NEXT (dB/100m) Minimum			ACR (dB/100m) Minimum			PS-NEXT (dB/100m) Minimum		
	TIA 568-B.2		Superior Essex	TIA 568-B.2		Superior Essex	TIA 568-B.2		Superior Essex	TIA 568-B.2		Superior Essex
	Specified	Guaranteed	Typical	Specified	Guaranteed	Typical	Calculated	Guaranteed	Typical	Specified	Guaranteed	Typical
1	2.0	2.0	1.8	65.3	68.3	79.4	63.3	65.9	77.7	62.3	66.3	77.2
4	4.1	4.0	3.6	56.3	59.3	69.9	52.2	54.9	66.4	53.3	57.3	67.4
8	5.8	5.7	5.1	51.8	54.8	65.1	46.0	48.8	60.0	48.8	52.8	62.7
10	6.5	6.4	5.8	50.3	53.3	63.6	43.8	46.7	57.9	47.3	51.3	61.2
16	8.2	8.2	7.4	47.3	50.3	60.4	39.1	41.9	53.1	44.3	48.3	58.0
20	9.3	9.2	8.2	45.8	48.8	59.0	36.5	39.5	50.9	42.8	46.8	56.6
25	10.4	10.3	9.3	44.3	47.3	57.5	33.9	37.0	48.3	41.3	45.3	55.1
31.25	11.7	11.6	10.5	42.9	45.9	56.0	31.2	34.3	45.7	39.9	43.9	53.5
62.5	17.0	16.8	14.9	38.4	41.4	51.7	21.4	24.7	36.8	35.4	39.4	49.2
100	22.0	21.7	19.2	35.3	38.3	48.5	13.3	19.5	29.5	32.3	36.3	46.0
155		27.8	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	37.7
350		44.4	37.8		26.2	39.3			1.7		24.2	36.8

  

Frequency MHz	PS-ACR (dB/100m) Minimum			Return Loss (dB/100m) Minimum			ELFEXT (dB/100m) Minimum			PS-ELFEXT (dB/100m) Minimum		
	TIA 568-B.2		Superior Essex	TIA 568-B.2		Superior Essex	TIA 568-B.2		Superior Essex	TIA 568-B.2		Superior Essex
	Calculated	Guaranteed	Typical	Specified	Guaranteed	Typical	Specified	Guaranteed	Typical	Specified	Guaranteed	Typical
1	60.3	64.4	75.4	20.0	20.0	28.5	63.8	63.8	72.6	60.8	60.8	70.6
4	49.2	53.4	64.0	23.0	23.0	35.6	51.7	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	36.1	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	37.7	37.7	47.0	34.7	34.7	45.2
25	30.9	35.5	46.0	24.3	24.3	35.2	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	27.8	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		6.8	19.4		18.8	28.4		19.9	29.3		16.9	27.2
200		1.0	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

Input Impedance (Ohms) Guaranteed	Delay Skew (ns/100m)		Velocity of Propagation (%) Nominal	DC Resistance (Ohms/100m)		Resistance Unbalance (%)		
	Maximum	Typical		Maximum	Typical	Maximum	Typical	
100+/-15 @ 1-100MHz	CMR	25	12	70	9.4	9.0	5.0	0.5
100+/-22 @ 100-350MHz	CMP	25	14	73	9.4	9.0	5.0	0.5

#### Standards Compliance:

UL 444, UL Listed CMP (NFPA 262), UL Listed CMR (UL 1666), ISO/IEC 11801, ANSI/TIA/EIA 568-B.2, ANSI/ICEA S-90-661-2002, UL Verified to Category 5e, RoHS Compliant.