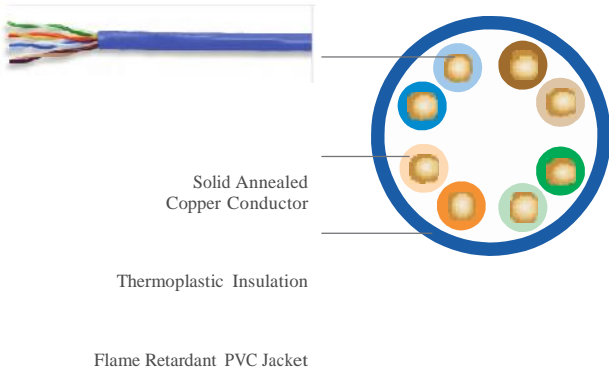


Cobra Category 5e+

CMR/CMP



Specifications

Pair Count	4
Conductor	Solid annealed copper
AWG (mm)	24 (0.51)
Insulation	CMR: Polyolefin CMP: FEP
Insulation Colors	Pair 1: ColorTip Light Blue, Blue Pair 2: ColorTip Light Orange, Orange Pair 3: ColorTip Light Green, Green Pair 4: ColorTip Light Brown, Brown
Jacket	CMR: Flame retardant (FR) PVC CMP: FR, low smoke PVC
Characteristic Impedance (Ohms)	100 ± 15
Nominal Velocity of Propagation (%)	CMR: 70 CMP: 73
Performance Compliance	UL 444 CSA C22.2 No. 214-08 UL 1666 NFPA 262 ANSI/TIA-568-C.2 ANSI/ICEA S-90-661-2008 Article 800, NEC (NFPA 70) RoHS-compliant
NRTL Programs	UL Verified CAT 5e UL, c(UL) Listed CMR UL, c(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
- Power over Ethernet (PoE) – IEEE 802.3af
- PoE+ – IEEE 802.3at Type 1 and 2
- 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 PSACR over CAT 5e
- “WideMouth” POP™ Box design
- CableID® alpha numeric code printed every 2 feet
- 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
- Allows both ends of a cable run to be easily identifiable without the need to separately label or tone the cable
- 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 ¹	Nominal Diameter in (mm)	Approx. Weight lbs/kft (kg/km)	Package	Packages per Pallet
CMR	152-200-x51	0.19 (4.8)	19 (28)	1,000' Reel-in-a-Box	45
CMR	152-240-x51	0.19 (4.8)	19 (28)	1,000' POP box	36
CMP	152-200-x81	0.19 (4.8)	21 (31)	1,000' Reel-in-a-Box	45
CMP	152-241-x81	0.19 (4.8)	21 (31)	1,000' POP box	45

Jacket Colors

¹Replace “x” with: Blue = 2 Gray = 3 White = 4 Green = 5 Yellow = 6 Purple = 7 Red = 9 Brown = B Orange = D Black = E

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	GRUPO MATEL		TIA-568-C.2	GRUPO MATEL		568-C.2	GRUPO MATEL		TIA-568-C.2	GRUPO MATEL	
	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

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Frequency MHz	PSACR Minimum dB/100 m			Return Loss Minimum dB/100 m			ELFEXT Minimum dB/100 m			m		
	TIA-568-C.2	GRUPO MATEL		TIA-568-C.2	GRUPO MATEL		568-C.2	GRUPO MATEL		TIA-568-C.2	GRUPO MATEL	
	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	20.8	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