

# Marathon LAN® Category 5e CMR/CMP



## Product Description

Marathon LAN Category 5e cable offers an exceptional value for jobs which require standards compliance at a cost-effective price. While Marathon LAN cable meets all of the TIA/EIA 568-B.2 specifications, it also offers other features that make it easier to use, save on installation time and expense and ensure product quality during the installation. From the QuickCount® feature, which marks the exact cable remaining in the box, to the WideMouth payout design, which reduces tension on the wire as it is pulled during installation, Marathon LAN cable provides more overall value than any other Category 5e product available today.

## Features

- Meets TIA/EIA 568-B specification
- "WideMouth" POP® Box design
- QuickCount® marking system
- Color coded labels
- ColorTip™ circuit identification system

## Benefits

- Provides cost-effective solution
- Reduces tension on wire to ensure proper electrical performance after installation
- Eliminates guesswork of footage in box and reduces scrap
- Reduces time with inventory management
- Easily identifiable conductor mates, even in low light environment

## 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>	51-243-25	4	24 (0.5)	Blue	0.20 (5.1)	19 (28)	1000' Reel-in-a-Box
	51-243-35	4	24 (0.5)	Gray	0.20 (5.1)	19 (28)	1000' Reel-in-a-Box
	51-243-45	4	24 (0.5)	White	0.20 (5.1)	19 (28)	1000' Reel-in-a-Box
	51-243-55	4	24 (0.5)	Green	0.20 (5.1)	19 (28)	1000' Reel-in-a-Box
	51-243-65	4	24 (0.5)	Yellow	0.20 (5.1)	19 (28)	1000' Reel-in-a-Box
	51-243-75	4	24 (0.5)	Purple	0.20 (5.1)	19 (28)	1000' Reel-in-a-Box
	51-243-95	4	24 (0.5)	Red	0.20 (5.1)	19 (28)	1000' Reel-in-a-Box
	51-240-25	4	24 (0.5)	Blue	0.20 (5.1)	19 (28)	1000' POP Box
	51-240-35	4	24 (0.5)	Gray	0.20 (5.1)	19 (28)	1000' POP Box
	51-240-45	4	24 (0.5)	White	0.20 (5.1)	19 (28)	1000' POP Box
	51-240-55	4	24 (0.5)	Green	0.20 (5.1)	19 (28)	1000' POP Box
	51-240-65	4	24 (0.5)	Yellow	0.20 (5.1)	19 (28)	1000' POP Box
	51-240-75	4	24 (0.5)	Purple	0.20 (5.1)	19 (28)	1000' POP Box
	51-240-95	4	24 (0.5)	Red	0.20 (5.1)	19 (28)	1000' POP Box
	51-240-D5	4	24 (0.5)	Orange	0.20 (5.1)	19 (28)	1000' POP Box
51-240-E5	4	24 (0.5)	Black	0.20 (5.1)	19 (28)	1000' POP Box	
<b>CMP</b>	51-243-28	4	24 (0.5)	Blue	0.21 (5.3)	23 (34)	1000' Reel-in-a-Box
	51-243-38	4	24 (0.5)	Gray	0.21 (5.3)	23 (34)	1000' Reel-in-a-Box
	51-243-48	4	24 (0.5)	White	0.21 (5.3)	23 (34)	1000' Reel-in-a-Box
	51-243-58	4	24 (0.5)	Green	0.21 (5.3)	23 (34)	1000' Reel-in-a-Box
	51-243-68	4	24 (0.5)	Yellow	0.21 (5.3)	23 (34)	1000' Reel-in-a-Box
	51-243-78	4	24 (0.5)	Purple	0.21 (5.3)	23 (34)	1000' Reel-in-a-Box
	51-243-98	4	24 (0.5)	Red	0.21 (5.3)	23 (34)	1000' Reel-in-a-Box
	51-241-28	4	24 (0.5)	Blue	0.21 (5.3)	23 (34)	1000' POP Box
	51-241-38	4	24 (0.5)	Gray	0.21 (5.3)	23 (34)	1000' POP Box
	51-241-48	4	24 (0.5)	White	0.21 (5.3)	23 (34)	1000' POP Box
	51-241-58	4	24 (0.5)	Green	0.21 (5.3)	23 (34)	1000' POP Box
	51-241-68	4	24 (0.5)	Yellow	0.21 (5.3)	23 (34)	1000' POP Box
	51-241-78	4	24 (0.5)	Purple	0.21 (5.3)	23 (34)	1000' POP Box
	51-241-98	4	24 (0.5)	Red	0.21 (5.3)	23 (34)	1000' POP Box
	51-241-C8	4	24 (0.5)	Orange	0.21 (5.3)	23 (34)	1000' POP Box
	51-241-D8	4	24 (0.5)	Pink	0.21 (5.3)	23 (34)	1000' POP Box
	51-241-E8	4	24 (0.5)	Black	0.21 (5.3)	23 (34)	1000' POP Box

Note: For additional colors and packages, please contact your Superior Essex sales professional.

## Marathon LAN 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	Typical	Specified Maximum	Typical	Calculated	Typical	Specified	Typical
1	2.0	2.0	65.3	78.6	63.3	76.7	62.3	76.2
4	4.1	3.9	56.3	68.6	52.2	64.8	53.3	66.2
8	5.8	5.5	51.8	63.8	46.0	58.4	48.8	61.4
10	6.5	6.2	50.3	62.4	43.8	56.3	47.3	60.0
16	8.2	7.8	47.3	59.3	39.1	51.5	44.3	56.8
20	9.3	8.8	45.8	57.8	36.5	49.0	42.8	55.4
25	10.4	9.8	44.3	56.3	33.9	46.4	41.3	53.8
31.25	11.7	11.1	42.9	54.7	31.2	43.8	39.9	52.3
62.5	17.0	15.8	38.4	50.6	21.4	34.7	35.4	48.0
100	22.0	20.2	35.3	47.3	13.3	27.2	32.3	44.8
155		25.5		44.8		19.2		42.0
200		29.3		43.4		13.8		40.5
250		33.3		41.4		8.4		39.0
300		36.9		40.6		3.9		38.1
350		39.9		39.0				36.6

  

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	Typical	Specified	Typical	Specified	Typical	Specified	Typical
1	60.3	74.3	20.0	28.6	63.8	72.3	60.8	70.7
4	49.2	62.4	23.0	34.8	51.7	60.5	48.7	58.9
8	43.0	56.0	24.5	33.9	45.7	54.6	42.7	53.0
10	40.8	53.9	25.0	34.4	43.8	52.7	40.8	51.1
16	36.1	49.1	25.0	34.7	39.7	48.7	36.7	47.1
20	33.5	46.7	25.0	34.9	37.7	46.8	34.7	45.2
25	30.9	44.2	24.3	33.7	35.8	44.9	32.8	43.3
31.25	28.2	41.5	23.6	32.8	33.9	43.0	30.9	41.3
62.5	18.4	32.5	21.5	29.5	27.8	37.1	24.8	35.3
100	10.3	25.0	20.1	27.5	23.8	33.0	20.8	31.2
155		17.0		24.8		29.1		27.4
200		11.7		23.0		26.8		25.1
250		6.2		21.4		24.8		23.1
300		1.7		20.2		23.3		21.6
350				19.2		22.1		20.3

PREMISES COPPER

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	45	11	71	9.38	9.00	5.0	0.7
100+/-22 @ 100-200MHz	CMP	45	12	74	9.38	9.00	5.0	0.8
100+/-32 @ 200-350MHz								

#### 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.