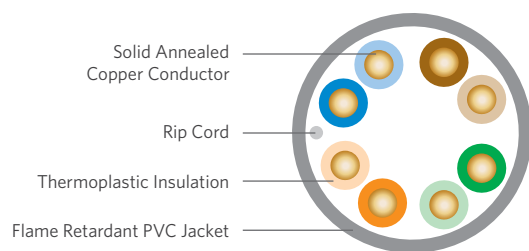


# Marathon LAN® Category 5e

CMR/CMP



## SPECIFICATIONS

|                                   |  |
|-----------------------------------|--|
| Pair Count                        | 4  |
| Conductor                         | Solid annealed copper  |
| AWG (mm)                          | 24 (0.51)  |
| Insulation                        | Thermoplastic  |
| Insulation Colors                 | Pair 1: ColorTip Light Blue, Blue<br>Pair 2: ColorTip Light Orange, Orange<br>Pair 3: ColorTip Light Green, Green<br>Pair 4: ColorTip Light Brown, Brown |
| Jacket                            | CMR: Flame retardant (FR) PVC<br>CMP: FR, low smoke PVC  |
| Characteristic Impedance Ohms     | 100 ± 15   |
| Nominal Velocity of Propagation % | CMR: 71<br>CMP: 74   |
| Performance Compliance            | UL 444<br>CSA C22.2 No. 214-08<br>UL 1666<br>NFPA 262<br>ANSI/TIA-568-C.2<br>ANSI/ICEA S-90-661-2012<br>Article 800, NEC (NFPA 70)                       |
| NRTL Programs                     | UL or ETL Verified CAT 5e<br>UL, c(UL) Listed CMR<br>UL, c(UL) Listed CMP  |
| Sustainability                    | UL Certified EPD<br>HPD<br>Multi-Attribute Certification<br>USGBC® Member<br>RoHS-compliant/RoHS 2-compliant<br>REACH-compliant                          |

## PRODUCT DESCRIPTION



**FIRST MANUFACTURER IN THE INDUSTRY**  
to offer products that contribute toward LEED!

Marathon LAN® Category 5e cable offers an exceptional value for jobs that require standards compliance at a cost-effective price. While Marathon LAN cable meets all of the ANSI/TIA-568-C.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 CAT 5e product available today.

## 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

- UL Certified Environmental Product Declaration (EPD)
- Health Product Declaration™ (HPD™)
- Multi-Attribute Certification by GreenCircle Certified, LLC
- Meets ANSI/TIA-568-C.2 specification
- Tested to 350 MHz
- “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

- Contributes toward 1 LEED point under the Material and Resources credit (MRc)
- Contributes toward 1 LEED point under the MRC
- Offers an overview of the sustainability of a product, its packaging and manufacturing
- Provides cost-effective solution
- Assures ample bandwidth headroom
- 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 <sup>1</sup> | Nominal Diameter in (mm) | Approx. Weight lbs/kft (kg/km) | Package |
|---------|--------------------------|--------------------------|--------------------------------|---------|
| CMR     | 51-xxx-y5                | 0.18 (4.6)               | 17 (25)                        | use key |
| CMP     | 51-xxx-y8                | 0.19 (4.8)               | 19 (28)                        | use key |

## PACKAGING

|                                  | 150 ft Coil | 200 ft Coil | 250 ft Coil | 300 ft Coil | 1,000 ft POP Box     | 1,000 ft Reel-in-a-box | 1,000 ft Plywood Reel | 2,500 ft Plywood Reel |
|----------------------------------|-------------|-------------|-------------|-------------|----------------------|------------------------|-----------------------|-----------------------|
| <sup>1</sup> Replace “xxx” with: | 225         | 229         | 230         | 231         | CMR: 240<br>CMP: 241 | 243                    | 220                   | 273                   |
| Packages per Pallet              | 240         | 120         | 144         | 120         | 45                   | 45                     | 36                    | 16                    |

## JACKET COLORS

<sup>1</sup>Replace “y” with: Blue = 2 Gray = 3 White = 4 Green = 5 Yellow = 6 Purple = 7 Red = 9 Pink = C Orange = D Black = E

## ELECTRICAL SPECIFICATIONS

| Frequency<br>MHz | Insertion Loss @ 20°C Maximum<br>dB/100 m |                | NEXT Minimum<br>dB/100 m |                | ACR Minimum<br>dB/100 m |                | PSNEXT Minimum<br>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                                 | Typical        | Specified                | Typical        | Calculated              | Typical        | Specified                  | Typical        |
| 1                | 2.0                                       | 1.8            | 65.3                     | 76.8           | 63.3                    | 81.0           | 62.3                       | 75.3           |
| 4                | 4.1                                       | 3.7            | 56.3                     | 67.8           | 52.2                    | 70.1           | 53.3                       | 66.3           |
| 8                | 5.8                                       | 5.4            | 51.8                     | 63.3           | 46.0                    | 63.9           | 48.8                       | 61.8           |
| 10               | 6.5                                       | 6.0            | 50.3                     | 61.8           | 43.8                    | 61.8           | 47.3                       | 60.3           |
| 16               | 8.2                                       | 7.7            | 47.2                     | 58.7           | 39.0                    | 57.0           | 44.3                       | 57.2           |
| 20               | 9.3                                       | 8.6            | 45.8                     | 57.3           | 36.5                    | 54.7           | 42.8                       | 55.8           |
| 25               | 10.4                                      | 9.6            | 44.3                     | 55.8           | 33.9                    | 52.2           | 41.3                       | 54.3           |
| 31.25            | 11.7                                      | 10.8           | 42.9                     | 54.4           | 31.2                    | 49.6           | 39.9                       | 52.9           |
| 62.5             | 17.0                                      | 15.5           | 38.4                     | 49.9           | 21.4                    | 40.4           | 35.4                       | 48.4           |
| 100              | 22.0                                      | 19.8           | 35.3                     | 46.8           | 13.3                    | 33.0           | 32.3                       | 45.3           |
| 155              |   | 24.8           |                          | 43.9           |                         | 25.1           |                            | 42.4           |
| 200              |   | 28.2           |                          | 42.3           |                         | 20.1           |                            | 40.8           |
| 250              |   | 31.8           |                          | 40.8           |                         | 15.0           |                            | 39.3           |
| 300              |   | 35.0           |                          | 39.6           |                         | 10.6           |                            | 38.1           |
| 350              |   | 38.3           |                          | 38.6           |                         | 6.3            |                            | 37.1           |

| Frequency<br>MHz | PSACR Minimum<br>dB/100 m |                | Return Loss Minimum<br>dB/100 m |                | ELFEXT Minimum<br>dB/100 m |                | PSELFEXT Minimum<br>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                | Typical        | Specified                       | Typical        | Specified                  | Typical        | Specified                    | Typical        |
| 1                | 60.3                      | 78.3           | 20.0                            | 33.0           | 63.8                       | 74.6           | 60.8                         | 69.3           |
| 4                | 49.2                      | 67.4           | 23.0                            | 36.0           | 51.8                       | 62.6           | 48.8                         | 57.3           |
| 8                | 43.0                      | 61.2           | 24.5                            | 37.5           | 45.7                       | 56.5           | 42.7                         | 51.2           |
| 10               | 40.8                      | 59.1           | 25.0                            | 38.0           | 43.8                       | 54.6           | 40.8                         | 49.3           |
| 16               | 36.1                      | 54.3           | 25.0                            | 38.0           | 39.7                       | 50.5           | 36.7                         | 45.2           |
| 20               | 33.5                      | 52.0           | 25.0                            | 38.0           | 37.8                       | 48.6           | 34.8                         | 43.3           |
| 25               | 30.9                      | 49.5           | 24.3                            | 37.3           | 35.8                       | 46.6           | 32.8                         | 41.3           |
| 31.25            | 28.2                      | 46.9           | 23.6                            | 36.6           | 33.9                       | 44.7           | 30.9                         | 39.4           |
| 62.5             | 18.4                      | 37.7           | 21.5                            | 34.5           | 27.9                       | 38.7           | 24.9                         | 33.4           |
| 100              | 10.3                      | 30.3           | 20.1                            | 33.1           | 23.8                       | 34.6           | 20.8                         | 29.3           |
| 155              |                           | 22.4           |                                 | 31.8           |                            | 30.8           |                              | 25.5           |
| 200              |                           | 17.4           |                                 | 31.0           |                            | 28.6           |                              | 23.3           |
| 250              |                           | 12.3           |                                 | 30.3           |                            | 26.6           |                              | 21.3           |
| 300              |                           | 7.9            |                                 | 29.8           |                            | 25.1           |                              | 19.8           |
| 350              |                           | 3.6            |                                 | 29.3           |                            | 23.7           |                              | 18.4           |

## SUSTAINABILITY LEADERSHIP



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