# Cat 5e

#### **Product Highlights**

Indoor

- REACH & RoHS 2 compliant
- Made in U.S.A.
- UL Verified
- Low Smoke Plenum construction
- Tested from 1 to 400 MHz
- · CMR-LSZH version offers a halogen free design for improved environmental performance

#### Packaging

- 1,000 feet (305 m)
- · Reverse sequential footage markings standard on each 1,000 foot package
- · Unit/pallet: 32 Reels CMP Carton Weight (lbs): 23.66 CMP Product Weight (lbs): 20.36 \*weight may vary, call for CMR information

#### **Options**

- · CMP-50 rated cables available
- · Reel-in-a-box available for Plenum

#### Applications

 Including: Gigabit Ethernet (IEEE 802.3ab) 100 Mbps Ethernet (IEEE 802.3u) 1000 Mbps ATM 622 Mbps ATM 15W PoE (IEEE 802.3af) 30W PoE+ (IEEE 802.3at) 60W PoE++ (IEEE 802.3bt Type 3) 100W PoE++ (IEEE 802.3bt Type 4)

#### Temp. Range

- Storage Temperature -40°C to +60°C (-40°F to +140°F)
- Installation Temperature 0°C to +60°C (+32°F to +140°F)
- Operation Temperature -20°C to +75°C (-4°F to +167°F)

## Category 5e UTP (Plenum)

c(UL)us Listed Type CMP (NFPA 262), CSA Type FT6

| PART #      | # OF PAIRS | CALCULATE | D CABLE O.D. | CABLE WEIGHT |          |  |
|-------------|------------|-----------|--------------|--------------|----------|--|
|             |            | inches mm |              | lbs/1000 ft  | kg/305 m |  |
| 39419-8-XXY | 4          | 0.18      | 4.57         | 20.36        | 9.24     |  |

# Category 5e UTP (Riser) c(UL)us Listed Type CMR (UL 1666), CSA Type FT4

| PART#       | # OF PAIRS | CALCULATE | D CABLE O.D. | CABLE WEIGHT |          |  |
|-------------|------------|-----------|--------------|--------------|----------|--|
|             |            | inches mm |              | lbs/1000 ft  | kg/305 m |  |
| 38696-8-XXY | 4          | 0.17      | 4.55         | 17.86        | 8.10     |  |

#### Building a Part Number

| BASE PART NUMBER EX. | NO. OF CONDUCTORS | JACKET COLOR | REEL TYPE |
|----------------------|-------------------|--------------|-----------|
| 39419                | 8                 | XX           | Y         |

Reel Type (Y):

Black (BK); Blue (BL); Brown (BR); Gray (GA); Green (GR); Red (RD); White (WH); Violet (VI); Yellow (YE) Reelex Boxes (2);

### **Transmission Specifications**

ANSI/TIA-568.2-D Category 5e Verified ISO/IEC 11801, 2nd ed. Class D Compliant

|             | Ins. | Loss | NE   | XT   | PSN  | EXT  | A    | CR   | PSA  | ACR  | AC   | RF   | PSA  | CRF  | Retur | n Loss |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|--------|
| Freq. (MHz) | Std. | Max. | Std. | Min. | Std. | Min. | Cal. | Min. | Cal. | Min. | Std. | Min. | Std. | Min. | Std.  | Min.   |
| 1           | 2.0  | 2.0  |      |      | 62.3 | 62.3 | 63.3 | 63.3 |      |      |      |      |      |      | 20.0  | 20.0   |
| 4           | 4.1  | 4.1  |      |      | 53.3 | 53.3 | 52.2 | 52.2 |      |      |      |      |      |      | 23.0  | 23.0   |
| 8           | 5.8  | 5.8  |      |      | 48.8 | 48.8 | 46.0 | 46.0 |      |      |      |      |      |      | 24.5  | 24.5   |
| 10          | 6.5  | 6.5  |      |      | 47.3 | 47.3 | 43.8 | 43.8 |      |      |      |      |      |      | 25.0  | 25.0   |
| 16          | 8.2  | 8.2  |      |      | 44.2 | 44.2 | 39.0 | 39.0 |      |      |      |      |      |      | 25.0  | 25.0   |
| 31.25       |      | 11.7 |      |      | 39.9 | 39.9 | 31.2 | 31.2 |      |      |      |      |      |      | 23.6  | 23.6   |
| 62.5        |      |      |      |      | 35.4 | 35.4 | 21.4 | 21.4 |      |      |      |      |      |      | 21.5  | 21.5   |
| 100         |      |      |      |      | 32.3 | 32.3 | 13.3 | 13.3 |      |      |      |      |      |      | 20.1  | 20.1   |
| 155*        | -    |      | -    |      | -    | 29.4 | 4.4  | 4.4  | 1.4  | 1.4  | -    |      | -    |      | -     | 18.8   |
| 200*        | -    |      | -    |      | -    | 27.8 | -    | -    | -    | -    | -    |      | -    |      | -     | 18.0   |
| 250*        | -    |      | -    |      | -    | 26.3 | -    | -    | -    | -    | -    |      | -    |      | -     | 17.3   |
| 400*        | -    |      | -    |      | -    | 23.3 | -    | -    | -    | -    | -    |      | -    | 8.8  | -     | 15.9   |

<sup>\*</sup>Frequencies beyond the TIA and ISO requirements are for information only. All values are dB/100m.

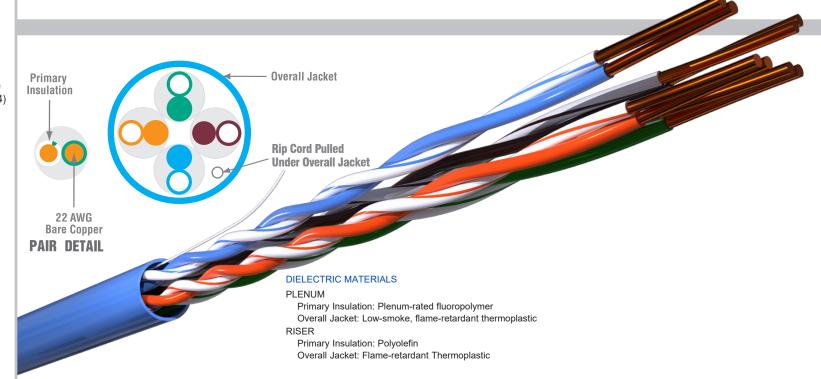
Photo is for



| Input Impedence:                       | 100 ± 15Ω (1.0 to 100 MHz) |
|--|----------------------------|
| Maximum Resistance Unbalance:          | 5%                         |
| Maximum Capacitance Unbalance:         | 330 pF/100 meters          |
| Maximum Delay Skew:                    | 45 ns/100 meters           |
| Nominal Velocity Of Propagation (Nvp): | 70%, Plenum<br>68%, Riser  |
| Voltage Rating:                        | 300 Volts                  |

| CABLE AMPACITY CHART |   |      |      |      |      |      |      |  |  |  |
|----------------------|---|------|------|------|------|------|------|--|--|--|
| Bundle Size          | Bundle Size 1 2-7 8-19 20-37 38-61 62-91 92-192 |      |      |      |      |      |      |  |  |  |
| Cable Temp           | 75°C  | 75°C | 75°C | 75°C | 75°C | 75°C | 75°C |  |  |  |
| 24 AWG               | 2.0   | 1.4  | 1.0  | 0.7  | 0.6  | 0.5  | 0.4  |  |  |  |

The table above is derived from the one approved by the National Fire Protection Agency and used in the National Electrical Code, NFPA-70. The complete table can be found in sections 725.144 and 800 Communication Circuits of the code. The table identifies the ampacity of each conductor (in amperes) in a 4-pair Class 2 or Class 3 data cable. Ambient temperature used for development of the table is 30°C (86°F) with all conductors in all cables carrying current. The table is based on 60°C (140°F), 75°C (167°F) and 90°C (194°F) rated cables. All cable temps are operational temp ratings. Cables with temp ratings above 90c would deliver additional power handling capacity.



1.800.772.0116

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