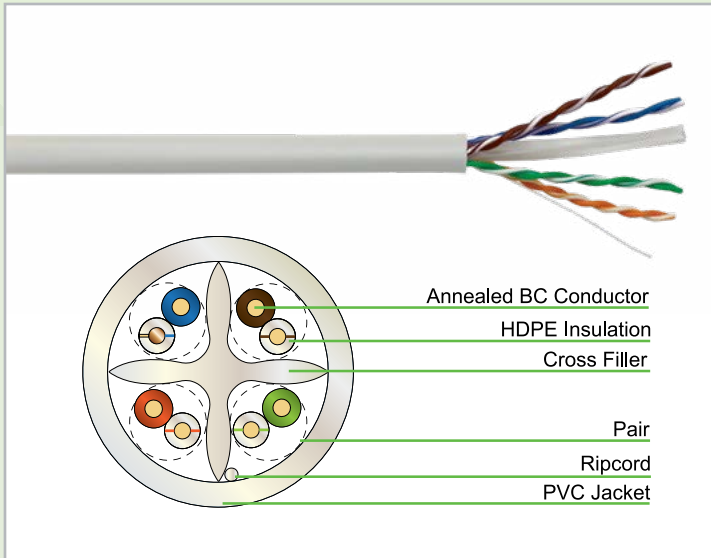


### VGC™ Category 6 U/UTP CMX Indoor/Outdoor Cable



### Applications

The Vericom Category 6 Cable supports a wide range of high-performance networking standards, including 10GBASE-T Ethernet (within the distance limitations defined by the standard), 1000BASE-T (Gigabit Ethernet), 100BASE-T (Fast Ethernet), and ATM protocols at 155 Mb/s, 622 Mb/s, and 1.2 Gb/s. It is also suitable for digital video, broadband and baseband analog video, as well as Voice over Internet Protocol (VoIP).

For added versatility, Category 6 cabling is fully backward compatible with existing Category 5e systems, ensuring seamless integration into legacy infrastructures while providing enhanced performance for modern networking demands in commercial or residential applications.

### Description / Specifications

Vericom Category 6 Unshielded CMX Cable is engineered to meet and exceed ANSI/TIA-568.2-D Category 6 and ISO 11801 Class E performance standards, supporting frequencies up to 250 MHz and verified through testing up to 550 MHz. The cable is constructed with 23 AWG solid copper conductors insulated with high-density polyethylene (HDPE), arranged in a four-pair unshielded twisted configuration. An integral cross filler separates the pairs to minimize crosstalk, ensuring maximum system performance. With a nominal diameter of 0.236" (6 mm), the Vericom Category 6 CMX Cable is rated for both indoor and outdoor applications, delivering reliable connectivity across diverse installation environments.

### Features & Benefits

- Cable meets ANSI/TIA-568.2-D for compatibility with all standard compliant components
- The cross filler within this Vericom Category 6 Cable keeps pairs separated and pair twist consistent through the length of the cable reducing crosstalk up to and beyond 250 MHz
- CMX rated for indoor and outdoor applications
- UL Listed and RoHS compliant to ensure safety requirements are met
- Tested to 550 MHz to ensure consistent, repeatable performance within the existing standards as well as any future requirements for Category 6 cables
- Cable marking starts at a 1000ft and displays remaining cable length for future use
- Pull box packaging to ease installation and storage

### Standards Compliance

- ANSI/TIA-568.2-D
- ISO/IEC 11801
- IEC 61156-5
- UL444
- RoHS Compliant
- Supports IEEE 802.3af/802.3at

## VGC™ Category 6 U/UTP CMX Indoor/Outdoor Cable

## Ordering Information

| Description                           | Packaging        | White       |                                                                                                                                      |
|---------------------------------------|------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Copper Cable, U/UTP, CAT6, 4Pair, CMX | 1000 FT Pull Box | MBW6U-04774 | VERICOM (UL) C(UL) E346149-I TYPE<br>CMX 75' 23AWG 4P CAT6 UTP ANSI/<br>TIA-568.2-D ROHS COMPLIANT XXXXFT<br>USED / XXXXFT REMAINING |

## Cable Marking

## Construction

**Conductor Material:** 23 AWG Annealed Bare Copper**Insulation Material:** High Density Polyethylene (HDPE)**Color Code :** BL & WH/BL, OR & WH/OR, GN & WH/GN, BR & WH/BR**Filler Material :** Polyethylene (PE)**Ripcord:** Yes**Jacket Material:** Polyvinyl Chloride (PVC)**Jacket Color:** Specified By Item Number

## Electrical

**Mutual Capacitance:** 5.6 nF/100m max**DC Resistance:** 9.38  $\Omega$ /100m max**DC Resistance Unbalance:** 5% max**Capacitance Unbalance Pair-to-Ground:** 330 pF/100m max

## Voltage

**UL Voltage Rating:** 300 V

## Environmental Conditions

**Cold Bend Test:** -20 °C 4 Hours No Cracking

## Delay

**Maximum Delay:** 537.6 ns/100m @ 100 MHz**Maximum Delay Skew:** 45 ns/100m**Velocity of Propagation:** 70.2% nom

## Physical

**Conductor Diameter:** 0.022 in. (0.55 mm)**Insulated Conductor Diameter:** 0.037 in. (0.95 mm)**Cable Diameter:** 0.24 in. (6 mm)**Nom. Cable Weight:** 26.6 lb. (12.1 kg)**Max. Installation Tension:** 25 lb. (110 N)**Min. Bend Radius:**  $\geq 4$  times of overall diameter

## Temperature

**UL Rating:** 75°C**Operating:** -4 °F to 140 °F (-20 °C to 60 °C)**Installation:** 32 °F to 140 °F (0 °C to 60 °C)**Storage:** -4 °F to 167 °F (-20 °C to 75°C)

## Transmission Performance (at 20 °C)

| Freq.<br>(MHz) | IL<br>Max.<br>(dB/100m) | NEXT<br>Min.<br>(dB) | PSNEXT<br>Min.<br>(dB) | ACR<br>Min.<br>(dB/100m) | PSACR<br>Min.<br>(dB/100m) | ACRF<br>Min.<br>(dB/100m) | PSACRF<br>Min.<br>(dB/100m) | RL<br>Min.<br>(dB/100m) | DOP<br>Max.<br>(NS/100m) | Delay Skew<br>Max.<br>(NS/100m) |
|----------------|-------------------------|----------------------|------------------------|--------------------------|----------------------------|---------------------------|-----------------------------|-------------------------|--------------------------|---------------------------------|
| 1              | 2.0                     | 74.3                 | 72.3                   | 68.26                    | 65.26                      | 67.8                      | 64.8                        | 20.0                    | 570                      | 45.00                           |
| 4              | 3.8                     | 65.3                 | 63.3                   | 57.22                    | 54.22                      | 55.8                      | 52.8                        | 23.0                    | 552                      |                                 |
| 8              | 5.3                     | 60.8                 | 58.8                   | 50.99                    | 47.99                      | 49.7                      | 46.7                        | 24.5                    | 547                      |                                 |
| 10             | 5.9                     | 59.3                 | 57.3                   | 48.83                    | 45.83                      | 47.8                      | 44.8                        | 25.0                    | 545                      |                                 |
| 16             | 7.5                     | 56.2                 | 54.2                   | 43.99                    | 40.99                      | 43.7                      | 40.7                        | 25.0                    | 543                      |                                 |
| 20             | 8.5                     | 54.8                 | 52.8                   | 41.52                    | 38.52                      | 41.8                      | 38.8                        | 25.0                    | 542                      |                                 |
| 25             | 9.5                     | 53.3                 | 51.3                   | 38.91                    | 35.91                      | 39.8                      | 36.8                        | 24.3                    | 541                      |                                 |
| 31.25          | 10.7                    | 51.9                 | 49.9                   | 36.15                    | 33.15                      | 37.9                      | 34.9                        | 23.6                    | 540                      |                                 |
| 62.5           | 15.4                    | 47.4                 | 45.4                   | 26.37                    | 23.37                      | 31.9                      | 28.9                        | 21.5                    | 539                      |                                 |
| 100            | 19.8                    | 44.3                 | 42.3                   | 18.33                    | 15.33                      | 27.8                      | 24.8                        | 20.1                    | 538                      |                                 |
| 150            | 24.7                    | 41.7                 | 39.7                   | 10.11                    | 7.11                       | 24.3                      | 21.3                        | 18.9                    | 537                      |                                 |
| 200            | 29.0                    | 39.8                 | 37.8                   | 3.36                     | 0.36                       | 21.8                      | 18.8                        | 18.0                    | 536                      |                                 |
| 250            | 32.8                    | 38.3                 | 36.3                   | N.A.                     | N.A.                       | 19.8                      | 16.8                        | 17.3                    | 536                      |                                 |
| 300            | 36.4                    | 37.1                 | 35.1                   | N.A.                     | N.A.                       | 18.3                      | 15.3                        | 16.8                    | 536                      |                                 |
| 350            | 39.8                    | 36.1                 | 34.1                   | N.A.                     | N.A.                       | 16.9                      | 13.9                        | 16.3                    | 536                      |                                 |
| 400            | 43.0                    | 35.3                 | 33.3                   | N.A.                     | N.A.                       | 15.8                      | 12.8                        | 15.9                    | 536                      |                                 |
| 450            | 46.0                    | 34.5                 | 32.5                   | N.A.                     | N.A.                       | 14.7                      | 11.7                        | 15.5                    | 535                      |                                 |
| 500            | 48.9                    | 33.8                 | 31.8                   | N.A.                     | N.A.                       | 13.8                      | 10.8                        | 15.2                    | 535                      |                                 |
| 550            | 51.7                    | 33.2                 | 31.2                   | N.A.                     | N.A.                       | 13.0                      | 10.0                        | 14.9                    | 535                      |                                 |