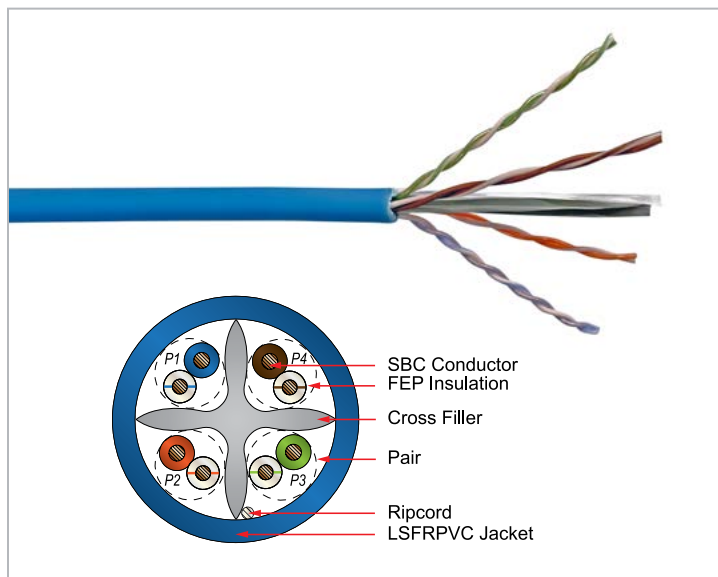




VGS6™ Category 6 UTP 23 AWG CMP Cable



Applications

The Vericom VGS6™ Category 6 Cable supports 10GBASE-T Ethernet based on limited distances per the standard, 1000BASE-T (Gigabit Ethernet), 100BASE-T (Fast Ethernet), 155 Mb/s ATM, 622 Mb/s ATM, 1.2 Gb/s ATM, Digital video and broadband/baseband analog video, Voice over Internet Protocol (VoIP). Category 6 is backwards compatible with Category 5e systems as well as IEEE 802.3af/802.3at (48 cables in a bundle) and 802.3bt type 3 and type 4 (24 cables in a bundle) PoE applications.

Description / Specifications

Vericom VGS6™ Category 6 Plenum Cable is designed to meet and exceed ANSI/TIA-568.2-D Category 6 and ISO 11801 Class E electrical performance requirements for frequencies up to 250 MHz. The 1000ft Reelex™ pull box of cable is constructed with 23AWG solid conductors in a four pair configuration, separated with an integral cross filler to reduce crosstalk to provide maximum system performance. The conductor insulation and filler is FEP material with a PVC jacket. VGS6™ Category 6 CMP Cable has a nominal cable diameter of 0.22" (5.7mm), is rated for plenum spaces and UL LP Listed for PoE applications.

Features & Benefits

- Smaller diameter cable design reduces bundle sizes to improve airflow in high density applications to reduce required pathway spaces and accommodate a smaller bend radius.
- The cross filler within the Vericom VGS6™ Category 6 Cable keeps pairs separated and pair twist consistent through the length of the cable reducing crosstalk up to and beyond 250 MHz
- Vericom VGS6™ is tested to 600 MHz to ensure consistent, repeatable performance within the existing standards as well as any future requirements for Category 6 cables.
- ANSI/TIA-568.2-D and ISO 11801 Class E Category 6 ensures interoperability with all standards compliant connectivity.
- UL LP Listing ensures support of PoE/PoE+ over 100 meter channels.
- Reelex™ Pull Box to reduce tangling and improve installation time

Standards Compliance

- ANSI/TIA-568.2-D
- ISO/IEC 11801
- EN 50173-1 Class EA
- IEC 61156-5
- RoHS Compliant
- UL 444 LP-Rating 0.6A for PoE
- IEEE 802.3bt PoE Type 1 (15.4 Watts) formerly 802.3af, Type 2 (30 Watts) formerly 802.3at, Type 3 (60 Watts), Type 4 (100 Watts)



VGS6™ Category 6 UTP 23 AWG CMP Cable

Ordering Information

Cable Marking

| Item Number | Description |
|------------------|---|
| SP6013P-XX1000FB | 23 AWG Copper Cable, U/UTP, CAT6, 4 Pair, CMP |

VERICOM (UL) c(UL) E346149-W TYPE CMP-LP(0.6A) 105° 23 AWG 4P CAT6 UTP TIA-568.2-D ROHS COMPLIANT YYMMDD HH:mm XXXXFT USED/XXXXFT REMAINING

Note: YYMMDD HH:mm is date code.

Specify jacket color by substituting **XX** in Item # for the following:

- BL
- BK
- GN
- GY
- WH
- YE

Item # Example: SP6013P-BL1000FB - Copper Cable, UTP, CAT6, 4 Pair, CMP Rated, Blue, 1000 ft Pull Box

Construction

- Conductor Material:** 23 AWG Solid Bare Copper
- Insulation Material:** Fluorinated Ethylene Propylene (FEP)
- Color Code :** BL & WH/BL, OR & WH/OR, GN & WH/GN, BR & WH/BR
- Filler Material:** Fluorinated Ethylene Propylene (FEP)
- Ripcord Material:** Polyester Multi-Yarn
- Jacket Material:** Low Smoke Flame Retardant PVC Compound
- Jacket Color:** Specied By Item Number

Delay

- Maximum Delay:** 537.6 ns/100m @ 100 MHz
- Maximum Delay Skew:** 45 ns/100m
- Velocity of Propagation:** 72% nom

Physical

- Conductor Diameter:** 0.022 in. (0.56 mm)
- Insulated Conductor Diameter:** 0.037 in. (0.94 mm)
- Cable Diameter:** 0.224 in. (5.7 mm)
- Nom. Cable Weight:** 26.60 lb. (12.07 kg)
- Max. Installation Tension:** 25 lb. (110 N)
- Min. Bend Radius:** 1.00 in. (25.40 mm)

Electrical

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

Temperature

- UL Rating:** 105°C
- Operating:** -4 °F to 221 °F (-20 °C to 105 °C)
- Installation:** 32 °F to 140 °F (0 °C to 60 °C)
- Storage:** -4 °F to 167 °F (-20 °C to 75°C)

Voltage

UL Voltage Rating: 300 V (CMP), 300 V (CL3P)

Transmission Performance (at 20 °C)

| Freq. (MHz) | IL Max. (dB/100m) | NEXT Min. (dB) | PSNEXT Min. (dB) | ACR Min. (dB/100m) | PSACR Min. (dB/100m) | ACRF Min. (dB/100m) | PSACRF Min. (dB/100m) | RL Min. (dB/100m) | DOP Max. (NS/100m) | Delay Skew Max. (NS/100m) |
|-------------|-------------------|----------------|------------------|--------------------|----------------------|---------------------|-----------------------|-------------------|--------------------|---------------------------|
| 1 | 2.03 | 74.30 | 72.30 | 72.28 | 70.28 | 67.80 | 64.80 | 20.00 | 570.00 | 45.00 |
| 4 | 3.78 | 65.27 | 63.27 | 61.49 | 59.49 | 55.76 | 52.76 | 23.01 | 552.00 | |
| 8 | 5.32 | 60.75 | 58.75 | 55.43 | 53.43 | 49.74 | 46.74 | 24.52 | 546.73 | |
| 10 | 5.95 | 59.30 | 57.30 | 53.35 | 51.35 | 47.80 | 44.80 | 25.00 | 545.38 | |
| 16 | 7.55 | 56.24 | 54.24 | 48.68 | 46.68 | 43.72 | 40.72 | 25.00 | 543.00 | |
| 20 | 8.47 | 54.88 | 52.78 | 46.31 | 44.31 | 41.78 | 38.78 | 25.00 | 542.05 | |
| 25 | 9.51 | 53.33 | 51.33 | 43.83 | 41.83 | 39.84 | 36.84 | 24.32 | 541.20 | |
| 31.25 | 10.67 | 51.88 | 49.88 | 41.20 | 39.20 | 37.90 | 34.90 | 23.64 | 540.44 | |
| 62.5 | 15.38 | 47.36 | 45.36 | 31.98 | 29.98 | 31.88 | 28.88 | 21.54 | 538.55 | |
| 100 | 19.80 | 44.30 | 42.30 | 24.50 | 22.50 | 27.80 | 24.80 | 20.11 | 537.60 | |
| 150 | 24.71 | 41.66 | 39.66 | 16.95 | 14.95 | 24.28 | 21.28 | 18.87 | 536.94 | |
| 200 | 28.98 | 39.78 | 37.78 | 10.80 | 8.80 | 21.78 | 18.78 | 18.00 | 536.55 | |
| 250 | 32.85 | 38.33 | 36.33 | 5.48 | 3.48 | 19.84 | 16.84 | 17.32 | 536.28 | |
| 300 | 36.43 | 37.14 | 35.14 | 0.72 | N.A. | 18.26 | 15.26 | 16.77 | 536.08 | |
| 350 | 39.79 | 36.14 | 34.14 | N.A. | N.A. | 16.92 | 13.92 | 16.30 | 535.92 | |
| 400 | 42.97 | 35.27 | 33.27 | N.A. | N.A. | 15.76 | 12.76 | 15.89 | 535.80 | |
| 450 | 46.01 | 34.50 | 32.50 | N.A. | N.A. | 14.74 | 11.74 | 15.53 | 535.70 | |
| 500 | 48.94 | 33.82 | 31.82 | N.A. | N.A. | 13.82 | 10.82 | 15.21 | 535.61 | |
| 550 | 51.76 | 33.19 | 31.19 | N.A. | N.A. | 12.99 | 9.99 | 14.92 | 535.54 | |
| 600 | 54.49 | 32.63 | 30.63 | N.A. | N.A. | 12.24 | 9.24 | 14.66 | 535.47 | |

VALUES ABOVE 250 MHZ ARE FOR INFORMATION ONLY. TECHNICAL SHEETS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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