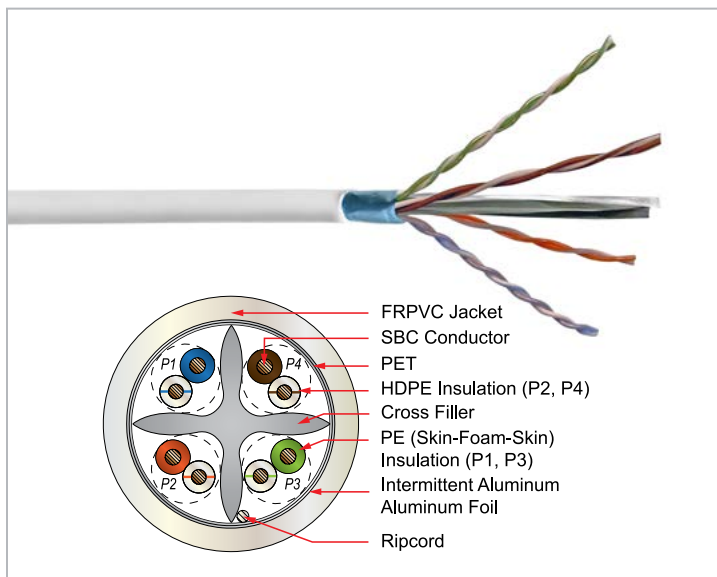




VGS6A™ Category 6A UTP 23 AWG CMR Cable



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 VGS6A™ Category 6A Cable keeps pairs separated and each individual pair twist consistent through the length of the cable reducing crosstalk up to and beyond 500 MHz
- The AXP™ non-continuous foil is wrapped around the four conductor pairs to resist alien crosstalk between adjacent cables to ensure maximum performance.
- ANSI/TIA-568.2-D and ISO 11801 Class E Category 6A ensures interoperability with all standards compliant connectivity.
- Supports PoE/PoE+ over 100 meter channels.

Applications

The Vericom VGS6A™ Category 6A Cable supports 10GBASE-T Ethernet, 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 6A is backwards compatible with Category 6 and 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 VGS6A™ Category 6A Cable is designed to meet and exceed ANSI/TIA-568.2-D Category 6A and ISO 11801 Class E electrical performance requirements for frequencies up to 500 MHz. The 1000ft reel in box is constructed with 23AWG solid conductors in a four pair configuration, separated with an integral cross filler, and surrounded by a non-continuous foil inside the jacket to improve alien crosstalk performance. Insulation material varies by conductor pairs; with Pairs 1 and 3 using PE (Skin-Foam-Skin) and Pairs 2 and 4 using HDPE insulation. This VGS6A™ Category 6A CMR Cable is rated for non-plenum spaces when the cable is needed to travel vertically from floor to floor. The nominal cable diameter of this cable is 0.29" (7.6mm).

Standards Compliance

- ANSI/TIA-568.2-D
- ISO/IEC 11801
- EN 50173-1 Class EA
- EN 50399
- IEC 61156-5
- RoHS Compliant
- UL 444
- 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)



VGS6A™ Category 6A UTP 23 AWG CMR Cable

Ordering Information

Item Number	Description	Color	
SP6613R-WH1000FB	23 AWG Copper Cable, U/UTP, CAT6A, 4 Pair, CMR	White	VERICOM E476116 23 AWG 4P 75° C C(UL)US CMR ROHS COMPLIANT YYMMDD HH:MM -- VERIFIED TO TIA-568.2-D CAT6A XXXXFT USED / XXXXFT REMAINING Note: YYMMDD HH:mm is date code.

Cable Marking

Construction

- Conductor Material:** 23 AWG Solid Bare Copper
- Insulation Material (P1, P3):** PE (Skin-Foam-Skin)
- Insulation Material (P2, P4):** HDPE
- Color Code :** BL & WH/BL, OR & WH/OR, GN & WH/GN, BR & WH/BR
- Filler Material:** Polyolefin (PO)
- Ripcord Material:** Polyester Multi-Yarn
- Barrier:** Intermittent Aluminum, Aluminum Foil
- Jacket Material:** Flame Retardant PVC Compound
- Jacket Color:** White

Delay

- Maximum Delay:** 538 ns/100m @ 100 MHz
- Maximum Delay Skew:** 45 ns/100m
- Velocity of Propagation:** 66% nom

Physical

- Conductor Diameter:** 0.022 in. (0.56 mm)
- Insulated Conductor Diameter (P1):** 0.047 in. (1.20 mm) max.
- Insulated Conductor Diameter (P2):** 0.043 in. (1.09 mm) max.
- Insulated Conductor Diameter (P3):** 0.045 in. (1.14 mm) max.
- Insulated Conductor Diameter (P4):** 0.044 in. (1.13 mm) max.
- Cable Diameter:** 0.29 in. (7.6 mm)
- Nom. Cable Weight:** 36.86 lb. (16.72 kg)
- Max. Installation Tension:** 25 lb. (110 N)
- Min. Bend Radius:** ≥4 times of overall diameter

Electrical

- Mutual Capacitance:** 5.6 nF/100m max
- DC Resistance:** 9.38 Ω/100m max
- DC Resistance Unbalance:** 2.5% max
- Capacitance Unbalance Pair-to-Ground:** 330 pF/100m max.

Voltage

- UL Voltage Rating:** 300 V (CMR)

Temperature

- UL Rating:** 75°C
- Operating:** -4 °F to 140 °F (-20 °C to 75 °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. (MHz)	IL Max. (dB/100m)	NEXT Min. (dB)	PSNEXT Min. (dB)	ACRF Min. (dB/100m)	PSACRF Min. (dB/100m)	RL Min. (dB/100m)	DOP Max. (NS/100m)	Delay Skew Max. (NS/100m)
1	2.10	74.30	72.30	67.80	64.80	20.00	570.00	45.00
4	3.80	65.30	63.30	55.80	52.80	23.00	552.00	
8	5.30	60.80	58.80	49.70	46.70	24.00	546.00	
10	5.90	59.30	57.30	47.80	44.80	25.00	545.00	
16	7.50	56.20	54.20	43.70	40.70	25.00	543.00	
20	8.40	54.80	52.80	41.80	38.80	25.00	542.00	
31.25	10.90	51.90	49.90	37.90	34.90	23.60	540.40	
62.5	15.00	47.40	45.40	31.90	28.90	21.50	539.00	
100	19.10	44.30	42.30	27.80	24.80	20.10	538.00	
200	27.60	39.80	37.80	21.80	18.80	18.00	537.00	
300	34.30	37.10	35.10	18.30	15.30	17.30	536.00	
400	40.10	35.30	33.30	15.80	12.80	17.30	536.00	
500	45.30	33.80	31.80	13.80	10.80	17.30	536.00	
550	47.70	33.19	31.19	12.99	9.99	14.92	535.54	

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

REV.20231207.2