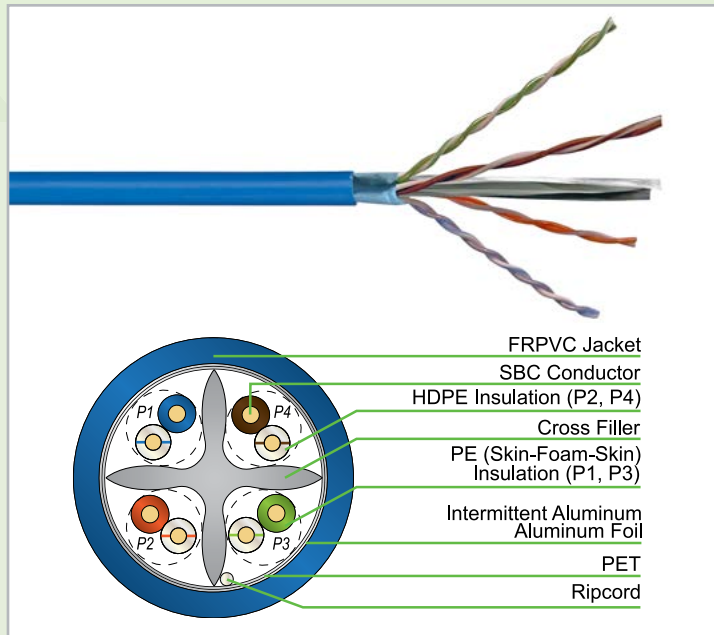


VGS6A™ Category 6 U/UTP Riser Cable



Applications

The Vericom VGS6A™ Category 6A Cable supports a wide range of applications, including 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, broadband/baseband analog video, and Voice over Internet Protocol (VoIP).

Fully backwards compatible with both Category 6 and Category 5e systems, the cable also complies with IEEE 802.3af/802.3at standards for Power over Ethernet (PoE) in bundles of up to 48 cables, as well as IEEE 802.3bt Type 3 and Type 4 PoE applications in bundles of up to 24 cables.

Description / Specifications

The Vericom VGS6A™ Category 6A Cable is engineered to exceed ANSI/TIA-568.2-D Category 6A and ISO 11801 Class E performance standards, supporting frequencies up to 500 MHz. Packaged in a 1000 ft reel-in-box, the cable features 23 AWG solid copper conductors in a four-pair configuration, separated by an integral cross filler and shielded with a non-continuous foil inside the jacket to enhance alien crosstalk performance.

Insulation materials vary by conductor pair: Pairs 1 and 3 utilize PE (Skin-Foam-Skin), while Pairs 2 and 4 use HDPE insulation. The VGS6A™ Category 6A CMR Cable is rated for non-plenum spaces, making it ideal for vertical runs between floors. With a nominal diameter of 0.29" (7.6 mm), it delivers reliable performance in demanding installation environments.

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.

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 6 U/UTP Riser Cable

Ordering Information

Cable Marking

Item Number	Description	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
SP6613R-XX1000FB	23 AWG Copper Cable, U/UTP, CAT6A, 4 Pair, CMP	
Specify jacket color by substituting XX in Item # for the following:		Note: YYMMDD HH:mm is date code.
		BL BK GY WH YE

Item # Example: SP6613R-BL1000FB - Copper Cable, UTP, CAT6A, 4 Pair, CMR Rated, Blue, 1000 ft Pull Box

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:** Specied By Item Number

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

Voltage

UL Voltage Rating: 300 V (CMR)

Transmission Performance (at 20 °C)

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

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)

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.

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