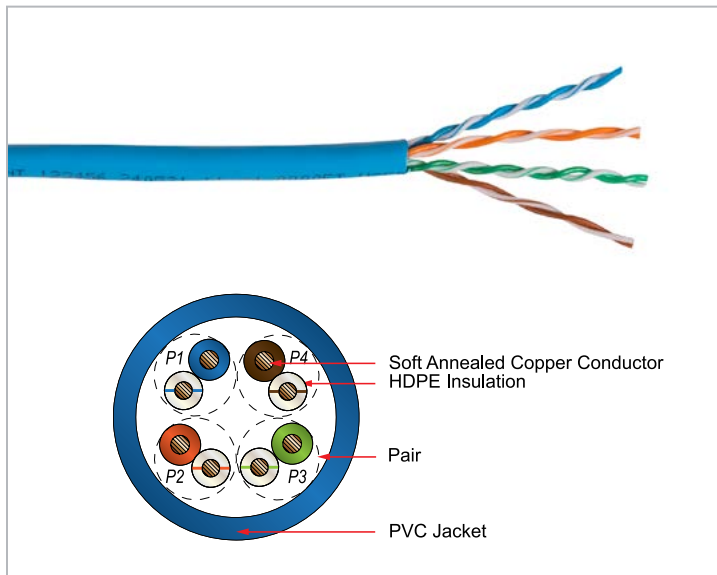




## VGS6E™ Category 6 UTP 23 AWG No-Spline CMR Cable



### Applications

The Vericom VGS6E™ 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 VGS6E™ Category 6 Riser 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, without a cross filler for faster, more efficient cable termination. The conductor insulation is HDPE material with a PVC jacket. VGS6E™ Category 6 CMR Cable has a nominal cable diameter of 0.22" (5.5mm), is rated for non-plenum spaces and suitable 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.
- Vericom VGS6E™ Category 6 Cable removes the filler to speed installation and manages crosstalk up to and beyond 250 MHz
- Vericom VGS6E™ is tested to 550 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.
- 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
- UL 1666 (CMR)
- UL 444
- RoHS Compliant
- Supports IEEE 802.3af/802.3at



## VGS6E™ Category 6 UTP 23 AWG No-Spline CMR Cable

### Ordering Information

Item Number	Description
EP6013R-XX1000FB	23 AWG Copper Cable, U/UTP, CAT6, 4 Pair, CMR

VERICOM (UL) c(UL) E346149-G TYPE CMR 75° 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** **WH**

Item # Example: EP6013R-BL1000FB - Copper Cable, UTP, CAT6, 4 Pair, CMR Rated, Blue, 1000 ft Pull Box

### Cable Marking

### Construction

- Conductor Material:** 23 AWG Soft & Annealed Copper
- Insulation Material:** High Density Poly Ethylene (HDPE)
- Color Code :** BL & WH/BL, OR & WH/OR, GN & WH/GN, BR & WH/BR
- Ripcord:** None
- Jacket Material:** Polyvinyl Chloride (PVC)
- Jacket Color:** Specified By Item Number

### Delay

- Maximum Delay:** 538 ns/100m @ 100 MHz
- Maximum Delay Skew:** 45 ns/100m
- Velocity of Propagation:** 72% nom

### Physical

- Conductor Diameter:** 0.022 in. (0.56 mm)
- Max. Insulated Conductor Diameter:** 0.038 in. (0.97 mm)
- Min. Insulated Conductor Diameter:** 0.036 in. (0.92 mm)
- Cable Diameter:** 0.22 in. (5.5 mm)
- Nom. Cable Weight:** 23.85 lb. (10.82 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:** 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)

### Voltage

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

### 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	2.00	74.30	72.30	72.28	70.28	67.80	64.80	20.00	570	45.00
4	3.80	65.30	63.30	61.49	59.49	55.80	52.80	23.00	552	
8	5.32	60.75	58.75	55.43	53.43	49.74	46.74	24.52	547	
10	6.00	59.30	57.30	53.35	51.35	47.80	44.80	25.00	545	
16	7.60	56.20	54.20	48.68	46.68	43.70	40.70	25.00	543	
20	8.50	54.80	52.80	46.31	44.31	41.80	38.80	25.00	542	
25	9.51	53.33	51.33	43.83	41.83	39.84	36.84	24.32	541	
31.25	10.70	51.90	49.90	41.20	39.20	37.90	34.90	23.60	540	
62.5	15.40	47.40	45.40	31.98	29.98	31.90	28.90	21.50	539	
100	19.80	44.30	42.30	24.50	22.50	27.80	24.80	20.10	538	
150	24.71	41.66	39.66	16.95	14.95	24.28	21.28	18.87	537	
200	29.00	39.80	37.80	10.80	8.80	21.80	18.80	18.00	537	
250	32.80	38.30	36.30	5.48	3.48	19.80	16.80	17.30	536	
300	36.43	37.14	35.14	0.72	N.A.	18.26	15.26	16.77	535	
350	39.79	36.14	34.14	N.A.	N.A.	16.92	13.92	16.30	535	
400	42.97	35.27	33.27	N.A.	N.A.	15.76	12.76	15.89	535	
450	46.01	34.50	32.50	N.A.	N.A.	14.74	11.74	15.53	535	
500	48.94	33.82	31.82	N.A.	N.A.	13.82	10.82	15.21	535	
550	51.76	33.19	31.19	N.A.	N.A.	12.99	9.99	14.92	535	

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

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