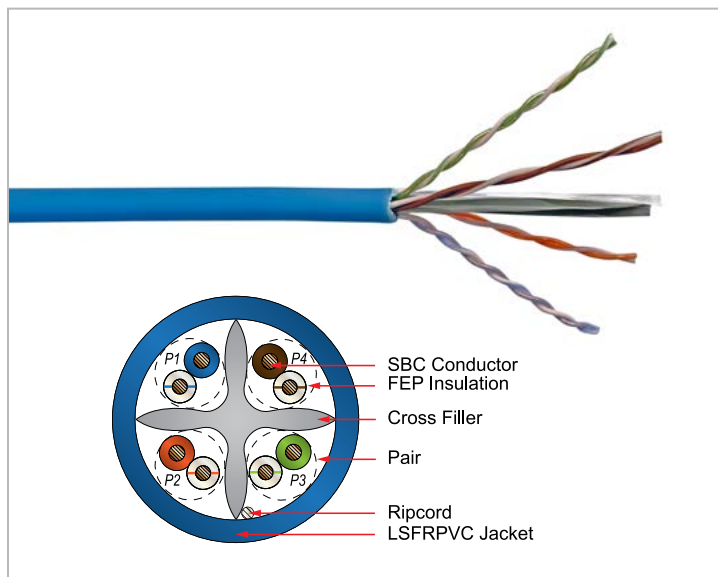




VGS6™ Category 6 UTP 23 AWG CMP Cable



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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