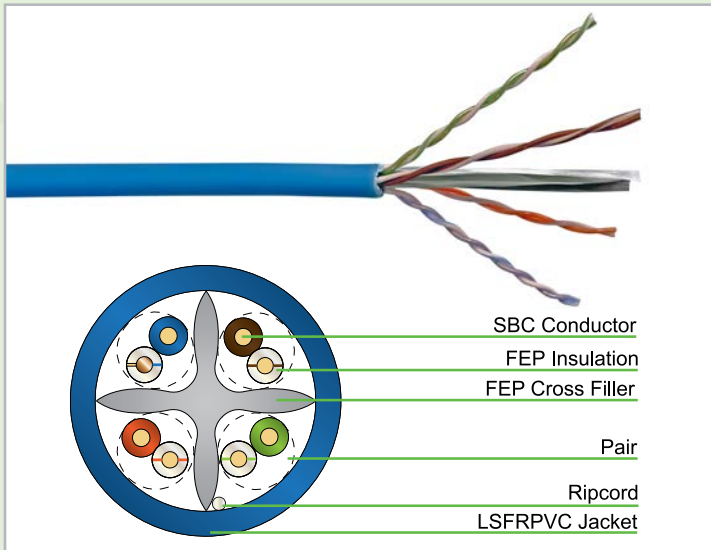


VGS6™ Category 6 U/UTP Plenum LP-Certified Cable



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 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 E
- 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)

Applications

The Vericom VGS6™ Category 6 Cable supports a wide range of applications, including 10GBASE-T Ethernet (at limited distances per standard), 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 Category 5e systems, the cable also meets IEEE 802.3af/802.3at requirements 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 VGS6™ Category 6 Plenum Cable is engineered to exceed ANSI/TIA-568.2-D Category 6 and ISO 11801 Class E performance standards, supporting frequencies up to 250 MHz. Packaged in a 1000 ft Reelex™ pull box, the cable features 23 AWG solid copper conductors in a four-pair configuration, separated by an integral cross filler to minimize crosstalk and ensure maximum system performance.

Constructed with FEP insulation and filler, and protected by a durable PVC jacket, the VGS6™ Category 6 CMP Cable has a nominal diameter of 0.22" (5.7 mm). It is rated for plenum spaces and UL LP Listed for Power over Ethernet (PoE) applications, delivering reliable performance in demanding installation environments.

VGS6™ Category 6 U/UTP Plenum LP-Certified Cable

Ordering Information

Cable Marking

Item Number	Description	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
SP6013P-XX1000FB	23 AWG Copper Cable, U/UTP, CAT6, 4 Pair, CMP	
Specify jacket color by substituting XX in Item # for the following: BL BK GN GY WH YE		Note: YYMMDD HH:mm is date code.

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

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

Voltage

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

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)

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)

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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