



Product # V-1234

Cat 6 Plenum

Category 6 unshielded, featuring solid bare copper conductors w/ spline. Supports 5 Gbit/s up to 328ft & 10 Gbit/s up to 180ft, tested to 600MHz. ETL Verified performance. Supports PoE+. Plenum (CMP) fire safety rating for installation in walls, risers (between floors), and plenums in both residential and commercial applications. UL Certified.

<https://www.voltive.com/products/voltive-cat-6-plenum>

Standards & Ratings

Ethernet Standard	ANSI/TIA-568.2-D
Supported Speeds	1000BASE-T, 2.5GBASE-T, and 5GBASE-T up to 328 feet, 10GBASE-T up to 180 feet
Performance Testing	ETL Verified
Power Over Ethernet (PoE)	IEEE 802.3af/at (PoE & PoE+)
Materials & Construction	UL 444
Fire Rating	Plenum (CMP)
Flame Test	NFPA 262
Flame Testing	UL Certified
Direct Burial?	No
Sunlight Resistant?	No
Voltage Rating	300V
Temperature Rating	75°C
RoHS?	Yes

Conductors

Material	Oxygen Free Copper
Gauge	23AWG
Stranding	Solid
Count	4 twisted pairs (8 total)
DC Resistance	≤ 9.38 ohms/100m

Part Numbers

Part #	Old Part #	Color	Length	Packaging	UPC	Weight	L x W x H (in)	Link
V-1234-3	V-1139	Black	500ft	Box	810095240256	15.9 lbs	12.4 x 9.1 x 13.2	View
V-1234-6	V-1100	Black	1000ft	Box	810095240034	29.9 lbs	16.5 x 10.2 x 15.9	View
V-1234-1	V-1137	Blue	500ft	Box	810095240232	15.9 lbs	12.4 x 9.1 x 13.2	View
V-1234-4	V-1065	Blue	1000ft	Box	850001725569	29.9 lbs	16.5 x 10.2 x 15.9	View

Insulation

Colors	Blue + White/Blue, Orange + White/Orange, Green + White/Green, Brown + White/Brown	
Material	Fluorinated Ethylene Propylene (FEP)	
Outer Diameter	Blue Pair	0.95mm ± 0.02mm
	Orange Pair	0.92mm ± 0.02mm
	Green Pair	0.94mm ± 0.02mm
	Brown Pair	0.92mm ± 0.02mm
Minimum Resistance	5000 megaohms/km	
Dielectric Strength	1.5KV AC for 2 seconds	

Spline

Material	Polyolefin (PO)
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Jacket

Available Colors	Black, Blue, White
Material	Low-smoke Flame Retardant Polyvinyl Chloride (LSFRPVC)
Outer Diameter	5.60mm ± 0.20mm
Thickness	0.38mm ± 0.03mm
Ripcord	Polyester (1000D)
Minimum Bend Radius	4 × diameter (22.4mm)
Maximum Pulling Tension	110 N
Printing	VOLTIVE CAT 6 UTP - V-1234 - 23AWG 4PR - (UL) CMP E520875-XX 75C - ETL VERIFIED TO TIA-568.2-D - MM/YY - XXX-XXX - VOLTIVE.COM - XXX FT USED / XXX FT REMAINING

Specifications & Technical Data



Revision: 2.6, Date: 2023-02-10

V-1234-2	V-1138	White	500ft	Box	810095240249	15.9 lbs	12.4 x 9.1 x 13.2	View
V-1234-5	V-1066	White	1000ft	Box	850001725576	29.9 lbs	16.5 x 10.2 x 15.9	View

Transmission Performance

Delay Skew	Resistance Unbalance	Mutual Capacitance	Capacitance Unbalance Pair-to-Ground
45.00 ns/100m	≤ 5%	≤ 5.6 nF/100m	≤ 330 pF/100m

Frequency	IL	NEXT	PSNEXT	ACRN	PSACRN	ACRF	PSACRF	RL	Propagation Delay
MHz	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	dB/100m	ns/100m
1.00	2.03	74.30	72.30	72.28	70.28	67.80	64.80	20.00	570.00
4.00	3.78	65.27	63.27	61.49	59.49	55.76	52.76	23.01	552.00
8.00	5.32	60.75	58.75	55.43	53.43	49.74	46.74	24.52	546.73
10.00	5.95	59.30	57.30	53.35	51.35	47.80	44.80	25.00	545.38
16.00	7.55	56.24	54.24	48.68	46.68	43.72	40.72	25.00	543.00
20.00	8.47	54.78	52.78	46.31	44.31	41.78	38.78	25.00	542.05
25.00	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
62.50	15.38	47.36	45.36	31.98	29.98	31.88	28.88	21.54	538.55
100.00	19.80	44.30	42.30	24.50	22.50	27.80	24.80	20.11	537.60
150.00	24.71	41.66	39.66	16.95	14.95	24.28	21.28	18.87	536.94
200.00	28.98	39.78	37.78	10.80	8.80	21.78	18.78	18.00	536.55
250.00	32.85	38.33	36.33	5.48	3.48	19.84	16.84	17.32	536.28
300.00	36.43	37.14	35.14	0.72	-	18.26	15.26	16.77	536.08
350.00	39.79	36.14	34.14	-	-	16.92	13.92	16.30	535.92
400.00	42.97	35.27	33.27	-	-	15.76	12.76	15.89	535.80
450.00	46.01	34.50	32.50	-	-	14.74	11.74	15.53	535.70
500.00	48.94	33.82	31.82	-	-	13.82	10.82	15.21	535.61
550.00	51.76	33.19	31.19	-	-	12.99	9.99	14.92	535.54
600.00	54.49	32.63	30.63	-	-	12.24	9.24	14.66	535.47

IL: Insertion Loss; **NEXT:** Near End Cross Talk; **PSNEXT:** Power Sum NEXT; **ACRN:** Attenuation to Crosstalk Ratio, Near End; **PSACRN:** Power Sum ACRN; **ACRF:** Attenuation to Crosstalk Ratio, Far End; **PSACRF:** Power Sum ACRF; **RL:** Return Loss. All values at 20°C.