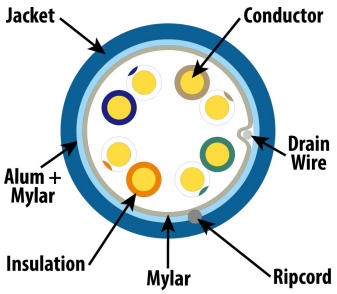
Specifications & Technical Data

Revision: **2.7**, Date: **2023-02-10**

VOLTIVE



Product # V-1227

Cat 5e Shielded Riser

Category 5e shielded, featuring solid bare copper conductors. Supports 2.5 Gbit/s up to 328ft, tested to 350MHz. ETL Verified performance. Supports PoE+. Riser (CMR) fire safety rating for installation in walls and risers (between floors) in both residential and commercial buildings. UL Certified.

https://www.voltive.com/products/V-1227

Standards & Ratings

Ethernet Standard	ANSI/TIA-568.2-D
Supported Speeds	1000BASE-T and 2.5GBASE-T up to 328 feet
Performance Testing	ETL Verified
Power Over Ethernet (PoE)	IEEE 802.3af/at/bt (PoE, PoE+, & 4PPoE/PoE++)
Materials & Construction	UL 444
Fire Rating	Riser (CMR)
Flame Test	UL 1666
Flame Testing	UL Certified
Direct Burial?	No
Sunlight Resistant?	No
Voltage Rating	300V
Temperature Rating	75°C
RoHS?	Yes

Insulation

Colors	Blue + White/Blue, Orange + White/Orange, Green + White/Green, Brown + White/Brown	
Material	Polyethylene (PE)	
Outer Diameter	Blue Pair	1.02mm ± 0.03mm
	Orange Pair	1.00mm ± 0.03mm
	Green Pair	0.99mm ± 0.03mm
	Brown Pair	1.02mm ± 0.03mm
Minimum Resistance	5000 megaohms/km	
Dielectric Strength	1.5KV AC for 2 seconds	

Conductors

Material	Oxygen Free Copper
Gauge	24AWG
Stranding	Solid
Count	4 twisted pairs (8 total)
DC Resistance	≤ 10.00 ohms/100m

Shield

Inner Layer Material	Mylar
Outer Layer Material	Aluminum + Mylar
Outer Layer Orientation	Mylar side facing out
Drain Wire	26AWG Solid Tinned Copper

Jacket

Available Colors	Black, Blue, White
Material	Polyvinyl Chloride (PVC)
Outer Diameter	6.30mm ± 0.30mm
Thickness	0.60mm ± 0.10mm
Ripcord	Cotton
Minimum Bend Radius	8 × diameter (50.4mm)
Maximum Pulling Tension	110 N
Printing	VOLTIVE CAT 5E FTP - V-1227 - 24AWG 4PR - (UL) CMR E520875-XX 75C - ETL VERIFIED TO TIA-568.2-D - MM/YY - XXX-XXX - VOLTIVE.COM - XXX FT USED / XXX FT REMAINING

Part Numbers

Part #	Old Part #	Color	Length	Packaging	UPC	Weight	L x W x H (in)	Link
V-1227-3	V-1118	Black	500ft	Box	810095240355	15.6 lbs	12.4 x 9.1 x 13.2	View
V-1227-6	V-1096	Black	1000ft	Box	850001725965	32.3 lbs	16.5 x 10.2 x 15.9	View
V-1227-1	V-1116	Blue	500ft	Box	810095240331	15.6 lbs	12.4 x 9.1 x 13.2	View
V-1227-4	V-1057	Blue	1000ft	Box	850001725491	32.3 lbs	16.5 x 10.2 x 15.9	View
V-1227-2	V-1117	White	500ft	Box	810095240348	15.6 lbs	12.4 x 9.1 x 13.2	View

V-1227-5	V-1095	White	1000ft	Box	850001725958	32.3 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	≤ 4%	≤ 5.6 nF/100m	≤ 160 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	2.04	65.30	62.30	63.26	60.26	63.80	60.80	20.00	570.00
4.00	4.05	56.26	53.26	52.21	49.21	51.75	48.75	23.01	552.00
8.00	5.76	51.75	48.75	45.99	42.99	45.73	42.73	24.51	546.72
10.00	6.46	50.30	47.30	43.84	40.84	43.80	40.79	25.00	545.38
16.00	8.24	47.23	44.23	38.99	35.99	39.71	36.71	25.00	543.00
20.00	9.26	45.78	42.78	36.52	33.52	37.77	34.77	25.00	542.04
25.00	10.42	44.33	41.33	33.91	30.91	35.84	32.84	24.32	541.20
31.25	11.72	42.87	39.87	31.15	28.15	33.90	30.90	23.64	540.43
50.00	15.06	39.81	36.81	24.75	21.75	29.82	26.82	22.21	539.09
62.50	16.99	38.36	35.36	21.37	18.37	27.88	24.88	21.53	538.55
100.00	21.97	35.29	32.29	13.32	10.32	23.79	20.79	20.10	537.60
125.00	24.87	33.84	30.84	8.97	5.97	21.86	18.86	19.42	537.21
200.00	32.42	30.78	27.78	–	–	17.77	14.77	18.00	536.54
250.00	36.85	29.33	26.33	–	–	15.84	12.84	17.32	536.27
300.00	40.97	28.14	25.14	–	–	14.25	11.25	16.76	536.07
350.00	44.85	27.13	24.13	–	–	12.91	9.91	16.29	535.92

***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.*