WIREPATH

BULK WIRE

SP-2xCAT5E-1000-XXX

U/UTP, 24AWG solid bare copper, CAT 5E, CM/CMG (x2)

Features

- 24 AWG 4 conductor Cat 5e wire, CMG rated
- Unshielded twisted pair, solid bare copper conductors
- Sweep frequency up to 350 MHz

Application

- LAN/Network cable
- Digital and analog transmission for data, video, audio and phone
- IEEE 802.3u 100BASE-T, and legacy speeds
- CDDI / ATM / Token Ring
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)

Electrical

- ANSI/TIA-568-C.2 (2009)
- ISO/IEC 11801 (Edition 2.2)
- IEC 61156-5 (Edition 2.0)

Flame Test

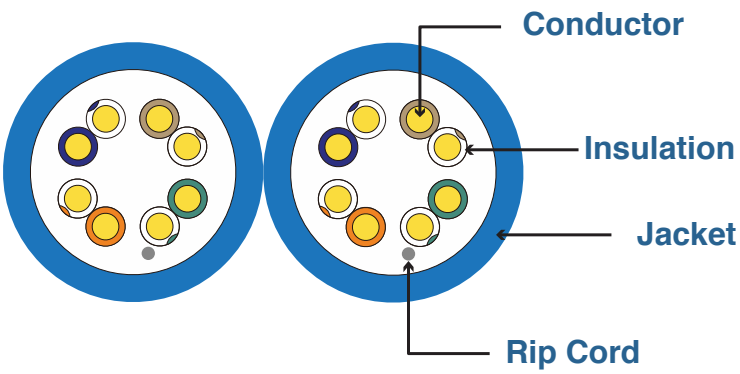
- UL 1685 (CM/CMG)

Material and Construction

- UL 444
- CSA 22.2 NO.214

EU Directive 2011/65/EC (RoHS2)
EU Directive 2006/95/EC (LVD)
CE compliance date: 2010.01.01

Sectional Drawing



Material and Construction			
Conductor	Material	24AWG solid bare copper	
Insulation	Material	Polyolefin (PO)	
	Color code & diameter	Blue & white/blue Stripe	0.90 ± 0.02 mm
		Orange & white/orange stripe	0.90 ± 0.02 mm
		Green & white/green stripe	0.90 ± 0.02 mm
		Brown & white/brown stripe	0.90 ± 0.02 mm
Twisted	Description	Left hand direction	
Assembly	Description	Left hand direction	
Rip cord	Material	Polyester multi-yarn	
Jacket	Material	Flame retardant polyvinyl chloride (FRPVC)	
	Diameter	5.0 ± 0.2 mm	
	Thickness	0.58 ± 0.05 mm	
	Color	As ordered	
Marking	WirePath™ Bulk Wire by SnapAV, E325177-HY (UL) C(UL) CMG, 4PAIR 24AWG FT-4, TIA/EIA 568B, UTP 2 X CAT5E UNSHIELDED 350MHz 75C, DDMMYY, 0000/1000 FT ~~~ 0998/0002 FT		

Usage & Environmental Condition		
Temperature range	Storage & shipping	-20°C to 75°C
	Installation	0°C to 60°C
	Operation	-20°C to 60°C
Minimum bending radius		≥ 4 times of overall diameter
Maximum pulling tension		≤ 110 N

Physical & Electrical Characteristics (at 20°C)	
Temperature & voltage rating	75°C / 300V
Spark test	2.5 KV DC
AC leakage current through overall jacket	≤ 10mA (1.5KV AC)
Cable cold bend	-20°C for 4 hr
Conductor DC resistance	≤ 9.38 Ω/100m
Resistance unbalane	≤ 5%
Dielectric strength	1.5 KV ac for 2 s
Insulation resistance	≥ 5000 MΩ•Km
Mutual capacitance	≤ 5.6 nF/100m
Capacitance unbalance pair-to-ground	≤ 330 pF/100m

Material and Construction

Frequency (MHz)	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
	Max. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Max. ns/100m	Max. ns/100m
1	2.04	65.30	62.30	63.26	60.26	63.80	60.80	20.00	570.00	
4	4.05	56.27	53.27	52.22	49.22	51.76	48.76	23.01	552.00	
8	5.77	51.75	48.75	45.99	42.99	45.74	42.74	24.52	546.73	
10	6.47	50.30	47.30	43.83	40.83	43.80	40.80	25.00	545.38	
16	8.25	47.24	44.24	38.99	35.99	39.72	36.72	25.00	543.00	
20	9.27	45.78	42.78	36.52	33.52	37.78	34.78	25.00	542.05	
25	10.42	44.33	41.33	33.91	30.91	35.84	32.84	24.32	541.20	
31.25	11.72	42.88	39.88	31.15	28.15	33.90	30.90	23.64	540.44	45.00
62.5	16.99	38.36	35.36	21.37	18.37	27.88	24.88	21.54	538.55	
100	21.98	35.30	32.30	13.33	10.33	23.80	20.80	20.11	537.60	
150	27.54	32.66	29.66	5.11	2.11	20.28	17.28	18.87	536.94	
200	32.42	30.78	27.78	N.A.	N.A.	17.78	14.78	18.00	536.55	
250	36.85	29.33	26.33	N.A.	N.A.	15.84	12.84	17.32	536.28	
300	40.97	28.14	25.14	N.A.	N.A.	14.26	11.26	16.77	536.08	
350	44.85	27.14	24.14	N.A.	N.A.	12.92	9.92	16.30	535.92	

Values above 100MHz are for information only.