



Technical Specifications

Product Line: 24-4P-L5SH-EN-DB

Description

4 pair 24 AWG solid, twisted, and shielded cable NEC type CMX outdoor. Sunlight resistant and suitable for Direct Burial. Third party verified to ANSI/TIA-568 Category 5e performance. Product manufactured compliant to the requirements of UL444 for installations and applications in accordance with NEC article(s) 725, 800, and 760.

Conductor

24 AWG
Solid annealed bare copper conductors
Diameter: 0.021" | 0.53mm

Electrical

DC resistance: $\leq 28.6 \Omega / 1000'$ | $93.81 \Omega/KM$
DCR Unbalance: $\leq 5\%$
Capacitance: 17.0 pF/FT | 55.8 pF/M
Impedance: $100 \pm 15 \Omega$
Propagation Delay (Skew): 45ns/100m MAX
Velocity of Propagation: 68%
Voltage rating: 300V
Pair to ground capacitance Unbalance: $\leq 330 \text{ pF/100M}$
Maximum current: 1.4A@25°C

Insulation

Polyolefin
Wall thickness: 0.010" | 0.25mm
Diameter: 0.041" | 1.04mm

Regulatory

ANSI/TIA-568-D Category 5e
NEC: CMX 75°C
Sunlight Resistant
Suitable for Direct Burial
EU RoHS III 2015/863/EU Compliant
REACH (EC) No 1907/2006 Compliant

Color Code

Pair 1: Orange, White/orange stripe
Pair 2: Blue, White/blue stripe
Pair 3: Green, White/green stripe
Pair 4: Brown, White/brown stripe

Packages

Reel: 1000' | 305M
Weight: 29 Lbs/1000' | 44 Kg/KM

Assembly

Pairs twisted in varying lay lengths with co-extruded like striped conductor
4 twisted pairs cabled on a common axis

Installation

Pull Tension: 25 Lbs | 111 N
Bend radius: 1.07" | 27mm unloaded
Bend radius: 2.14" | 54mm loaded

Construct

100% Polyester tape binder over core
100% Water Blocking Tape over inner binder and under foil shield
Ripcord under jacket

Applications

OSP LAN systems 10/100/1000BaseT
OSP Phone, Voice, Video over IP and security video
OSP BALUN support and media infrastructure
Infrared, audio

Shield

100% aluminum/polyester tape foil in
24 AWG solid tinned copper drain

Performance

LAN: 300 feet
Passive Baluns up to 2500 feet

Jacket

Flame rated polyvinyl chloride
Colors: Black
Wall thickness: 0.022" | 0.56mm
Diameter: 0.266" | 6.75mm

Final Outside Diameter (inches)

0.266

Specification Revision Date:

August 30, 2017



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Cat5E Performance Data:

Frequency	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
(MHz)	Max. dB/100m	Min. dB/100 m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100 m	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	45.00
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	45.98	42.98	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	36.51	33.51	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	31.16	28.16	33.90	30.90	23.64	540.44	
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	13.32	10.32	23.80	20.80	20.11	537.60	
150	27.54	32.66	29.66	5.12	2.12	20.28	17.28	18.87	536.94	
200	32.42	30.78	27.78	-1.64	-4.64	17.78	14.78	18.00	536.55	
250	36.85	29.33	26.33	-7.52	-10.52	15.84	12.84	17.32	536.28	
300	40.97	28.14	25.14	-12.83	-15.83	14.26	11.26	16.77	536.08	
350	44.85	27.14	24.14	-17.71	-20.71	12.92	9.92	16.30	535.92	