



Technical Specifications

Product Line: 24-8P-L6-SIAM

Description

Dual 4 pair 23 AWG solid, twisted, and unshielded cable

NEC type CMR and CEC type CMR FT4. Third party verified to ANSI/TIA-568C Category 6 performance. Product manufactured compliant to the requirements of UL444 for installations and applications in accordance with NEC articles 725 and 800.

Conductor

23 AWG

Solid annealed bare copper conductors

Diameter: 0.023" | 0.58mm

Electrical

DC resistance: $\leq 20.3 \Omega / 1000'$ | $66.6 \Omega/\text{KM}$

DCR Unbalance: $\leq 5.0\%$

Capacitance: 14.0 pF/FT | 45.9 pF/M

Impedance: $100 \pm 15 \Omega$

Propagation Delay (Skew): 45ns/100m MAX

Velocity of Propagation: 69%

Voltage rating: 300V

Pair to ground capacitance Unbalance: $\leq 330 \text{ pF}/100\text{M}$

Maximum current: 1.4A@25°C

Insulation

High density polyethylene

Wall thickness: 0.009" | 0.22mm

Diameter: 0.041" | 1.03mm

Regulatory

ANSI/TIA-568-C Category 6

NEC: CMR 75°C

CEC: CMG FT4 60°C

EU RoHS 2002/95/EC Compliant

Color Code

Note: Both cables use same code

Pair 1: Blue, White/blue stripe

Pair 2: Orange, White/orange stripe

Pair 3: Green, White/green stripe

Pair 4: Brown, White/brown stripe

Assembly

Pairs twisted in varying lay lengths with co-extruded like striped conductor

Each pair in a polyethylene X separator interstice

Packages

Reel: 1000' | 305M

Weight: 60 Lbs/1000' | 90 Kg/KM

Construct

Ripcord under the jackets

2 jacketed cables in parallel joined by a web

Installation

Pull Tension: 50 Lbs | 222 N

Bend radius: 4.75" | 122mm unloaded

Bend radius: 9.50" | 244mm loaded

Applications

Riser LAN systems 10/100/1000BaseT

Riser Phone, Voice, Video over IP and security video

BALUN support and media infrastructure

Infrared, audio

Shield

N/A

Performance

LAN: 300 feet

Passive Baluns up to 2500 feet

Jacket

Flame retardant polyvinyl chloride

Colors: Blue, White

Wall thickness: 0.020" | 0.50mm

Cable diameter: 0.234 x 0.478" | 5.95 x 12.15mm

Final Outside Diameter (inches)

0.234 x 0.478





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Specification Revision Date:

May 21, 2007

Category 5e Performance Chart

FREQ (MHz)	Insertion Loss (dB/100m)	NEXT (dB)	PSNEXT (dB)	ACR (dB/100m)	PSACR (dB/100m)	ELFEXT (dB/100m)	PSELFEXT (dB/100m)	RL (dB)
	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.
0.772	1.8	67.0	64.0	65.2	62.2	66.0	63.0	19.4
1.0	2.0	65.3	62.3	63.3	60.3	63.8	60.8	20.0
4.0	4.1	56.3	53.3	52.2	49.2	51.7	48.7	23.0
8.0	5.8	51.8	48.8	46.0	43.0	45.7	42.7	24.5
10.0	6.5	50.3	47.3	43.8	40.8	43.8	40.8	25.0
16.0	8.2	47.3	44.4	39.1	36.2	39.7	36.7	25.0
20.0	9.3	45.8	42.8	36.5	33.5	37.7	34.7	25.0
25.0	10.4	44.3	41.3	33.9	30.9	35.8	32.8	24.3
31.25	11.7	42.9	39.9	31.2	28.2	33.9	30.9	23.6
62.5	17.0	36.4	35.4	19.4	18.4	27.8	24.6	21.5
100.0	22.0	35.3	32.3	13.3	10.3	23.8	20.8	20.1
200.0	32.4	30.8	27.8	-1.6	-4.6	17.8	14.8	18.0
300.0	41.0	28.2	25.2	-12.8	-15.8	14.3	11.3	16.8
350.0	44.9	27.2	24.2	-17.7	-20.7	12.9	9.9	16.3

