



Technical Specifications

Product Line: 24-4P-P-L5SH

Description

4 pair 24 AWG solid, twisted, and shielded cable

NEC type CMP and CEC type CMP FT6. Third party verified to ANSI/TIA-568C Category 5e performance. Product manufactured compliant to the requirements of UL444 for installations and applications in accordance with NEC articles 725 and 800.

Conductor

24 AWG

Solid annealed bare copper conductors

Diameter: 0.021" | 0.53mm

Electrical

DC resistance: $\leq 28.59 \Omega / 1000'$ | $93.8 \Omega/KM$

DCR Unbalance: $\leq 5.0\%$

Capacitance: 17.0 pF/FT | 55.8 pF/M

Impedance: $100 \pm 15 \Omega$

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

Velocity of Propagation: 72%

Voltage rating: 300V

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

Maximum current: 1.4A@25°C

Insulation

Plenum rated thermoplastic

Wall thickness: 0.0098" | 0.25mm

Diameter: 0.0405" | 1.03mm

Regulatory

ANSI/TIA-568-C Category 5e

NEC: CMP 75°C

CEC: CMP FT6 60°C

EU RoHS 2002/95/EC 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: 24 Lbs/1000' | 36 Kg/KM

Assembly

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

4 twisted pairs cabled on a common axis

Installation

Pull Tension: 25 Lbs | 111 N

Bend radius: 2.25" | 58mm unloaded

Bend radius: 4.50" | 116mm loaded

Plenum cable should be conditioned at room temperature for 24 hours prior to installation and never installed below 32°F | 0°C ambient temperature

Construct

100% Polyester tape binder

Applications

Plenum LAN systems 10/100/1000BaseT

Plenum Phone, Voice, Video over IP and security video

BALUN support and media infrastructure

Infrared, audio

Shield

100% aluminum/polyester tape foil in

26 AWG 7-strand tinned copper drain

Performance

LAN: 300 feet

Passive Baluns up to 2500 feet





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Jacket

Plenum rated polyvinyl chloride
Colors: Blue, White, Green
Wall thickness: 0.015" | 0.38mm
Diameter: 0.225" | 5.72mm

Final Outside Diameter (inches)

0.225

Specification Revision Date:

February 10, 2010

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)	
	568 Max	Typical	568 Min	Typical	568 Min	Typical	568 Min	Typical	568 Min	Typical	568 Min	Typical	568 Min	Typical	568 Min	Typical
0.772	1.8	1.6	67.0	81.0	64.0	68.0	65.2	79.4	62.2	66.4	66.0	69.0	63.0	67.0	N/A	N/A
1.0	2.0	1.7	65.3	79.0	62.3	68.3	63.3	77.3	60.3	66.6	63.8	67.8	60.8	65.8	20.0	20.0
4.0	4.1	3.6	56.3	72.0	53.3	59.3	52.2	68.4	49.2	55.7	51.7	55.8	48.7	53.7	23.0	23.0
8.0	5.8	5.2	51.8	68.0	48.8	54.8	46.0	62.8	43.0	49.6	45.7	49.7	42.7	47.7	24.5	24.5
10.0	6.5	5.9	50.3	67.0	47.3	53.3	43.8	61.1	40.8	47.4	43.8	47.8	40.8	45.8	25.0	25.0
16.0	8.2	7.4	47.3	64.0	44.3	50.2	39.1	56.6	36.1	42.8	39.7	43.7	36.7	41.7	25.0	25.0
20.0	9.3	8.4	45.8	63.0	42.8	48.8	36.5	54.6	33.5	40.4	37.7	41.8	34.7	39.7	25.0	25.0
25.0	10.4	9.4	44.3	61.0	41.3	47.3	33.9	51.6	30.9	37.9	35.8	39.8	32.8	37.8	24.3	24.3
31.25	11.7	10.5	42.9	60.0	39.9	45.9	31.2	49.5	28.2	35.4	33.9	37.9	30.9	35.9	23.6	23.6
62.5	17.0	15.3	38.4	56.0	35.4	41.4	21.4	40.7	18.4	26.1	27.8	31.9	24.8	29.8	21.5	21.5
100.0	22.0	19.7	35.3	53.0	32.3	38.3	13.3	33.3	10.3	18.6	23.8	27.8	20.8	25.8	20.1	20.1
155.0		28.1		32.4		29.4		4.3		1.3		20.0		17.0		18.8
200.0		28.8		30.8		27.8		2.0		-1.0		17.8		14.8		18.0
250.0		32.4		29.3		26.3		-3.1		-6.1		15.8		12.8		17.3
300.0		41.0		28.1		25.1		-12.9		-15.9		14.3		11.3		16.8
350.0		44.9		27.1		24.1		-17.8		-20.8		12.9		9.9		16.3

