



Technical Specifications

Product Line: 24-4P-L5SH-EN

Description

4 pair 24 AWG solid, twisted, and shielded cable NEC type CMR and CEC type CMR FT4. 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: $\leq 28.6 \Omega / 1000'$ | $93.81 \Omega/KM$
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

High density polyethylene
Wall thickness: 0.0075" | 0.19mm
Diameter: 0.036" | 0.91mm

Regulatory

ANSI/TIA-568-C Category 5e
NEC: CMR 75 °C
CEC: CMG FT4 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: Lbs/1000' | 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: 2.50" | 64mm unloaded
Bend radius: 5.00" | 128mm loaded

Construct

100% Polyester tape binder
Ripcord under jacket

Applications

Riser LAN systems 10/100/1000BaseT
Riser 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

Jacket

Polyvinyl chloride
Colors: Black, Gray, Blue, Green, Violet, Red, White
Wall thickness: 0.022" | 0.56mm
Diameter: 0.250" | 6.35mm

Final Outside Diameter (inches)

0.250

Specification Revision Date:

November 26, 2012





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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

