ADDISON TECHNOLOGY

Coastal House, 180 Bridge Road, Southampton, England S031
Tel: (44) 1489 556957
Fax: (44) 1489 556931

Product Specification	FTP CAT5E 4PR 24AWG CABLE	US LISTED E222756

AD-CAT5EFTP4PCM24
AD-CAT5EFTP4PLH24

1. Wire Construction：

Pair	Wire Arrangement
1 P	Blue × White / Blue Stripe
2 P	Orange × White / Orange Stripe
3 P	Green × White / Green Stripe
4 P	Brown × White / Brown Stripe

2. Structure：

Item		Specification
Conductor	Material	Annealed Copper
	Construction	1 / 0.54 mm
	Diameter	0.54 ± 0.005 mm
Insulation	Material	HDPE
	Average Thickness	0.247 mm
	Diameter	1.03 ± 0.02 mm
Twisted		Refer to structure figure
Assembly		Arranged in accordance with the structure figure.
Non-woven tape		Approx. 0.2 mm in thick.

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Drain Wire	Material	Annealed Tinned Copper
	Construction	1 / 0.515 mm
Al – Mylar		Approx. 0.06mm in thick. (with Al side in)
Jacket	Material	PVC or LSOH
	Average Thickness	0.6 mm
	Diameter	6.3 ± 0.2 mm
Packing		305 m plywood drum in a box

3. Electrical Characteristics： Comply with TIA/EIA-568-B.2 Standard.

Item	Electrical Characteristics of Cable
Impedance (1 – 100 MHz)	100 ± 15 Ω
Conductor Resistance (20℃)	9.38 Ω Per 100 m (328 ft)
Resistance Unbalance (20℃)	Max. 5%
Insulation Resistance (20℃)	1500MΩ – Km DC 500V (Between wire and ground)
Dielectric strength	DC 500V / 1min. or AC 350 V / 1min.
Mutual Capacitance (1KHz)	Max. 5.6 nF Per 100 m (328 ft)
Capacitance unbalance (1KHz)	330 pF Per 100 m (328 ft) (pair to ground)
Delay Skew	Max. 45 ns Per 100 m (328 ft)

Frequency	Insertion Loss (dB/100m) Max.	Propagation Delay
0.772MHz	1.8	—
1 MHz	2.0	$534 + 36/\sqrt{f}$ (f：MHz)
4 MHz	4.1	
8 MHz	5.8	
10 MHz	6.5	
16 MHz	8.2	
20 MHz	9.3	
25 MHz	10.4	
31.25 MHz	11.7	
62.5 MHz	17.0	
100 MHz	22.0	

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Frequency	NEXT (dB/100m) Min.	PSNEXT (dB/100m) Min.	ELFXT (dB/100m) Min.	PSELFXT (dB/100m) Min.
0.772MHz	67.0	64.0	—	—
1 MHz	65.3	62.3	63.8	60.8
4 MHz	56.3	53.3	51.7	48.7
8 MHz	51.8	48.8	45.7	42.7
10 MHz	50.3	47.3	43.8	40.8
16 MHz	47.3	44.4	39.7	36.7
20 MHz	45.8	42.8	37.7	34.7
25 MHz	44.3	41.3	35.8	32.8
31.25 MHz	42.9	39.9	33.9	30.9
62.5 MHz	36.4	35.4	27.8	24.6
100 MHz	35.3	32.3	23.8	20.8

Return Loss (dB/100m)		
	1≦ f ＜10MHz	RL≧ 20+5.0 log(f)
	10≦ f ＜20MHz	RL≧ 25
	20≦ f ＜100MHz	RL≧ 25-7.0 log(f/20)