

i-Net Networks Category5e F/UTP Solid Cable

**Compliance**

Meets ANSI/EIA/TIA 568-B.2 requirements
Meets general purpose cable UL-1581 CM rating
Meets fire retardant low smoke IEC60332-1 rating

Material

Conductive material: Soft annealed electrolytic copper
Conductor insulation: HDPE
The cable jacket: PVC/LSZH
Shield: Aluminum tape shield helically applied over the cable core with a minimum overlap of 5 mm (0.19")

Physical

Conductor diameter: 0.51 mm (0.02") (24 AWG)
Insulated conductor diameter: 0.9 ± 0.2 mm ($0.035" \pm 0.008"$)
Outer cable diameter: 5.4 ± 0.2 mm ($0.21" \pm 0.008"$)
Jacket thickness: 0.4 mm (0.0157")
Minimum bend radius:
8xØ (installation), 6xØ (vertical cabling), 4xØ (horizontal)
Conductor elongation: 14% minimum
Rip cord has a breaking strength of 10 kg (98 N)
Drain wire diameter: 0.5 mm (0.019")
Pulling strength: 92 N
Breaking strength: 400 N
Installation temperature: $-5^{\circ}\text{C} \sim +50^{\circ}\text{C}$ ($+23^{\circ}\text{F} \sim +122^{\circ}\text{F}$)
Operating temperature: $-20^{\circ}\text{C} \sim +75^{\circ}\text{C}$ ($-4^{\circ}\text{F} \sim +167^{\circ}\text{F}$)
Weight per 1000 ft (304.8 m): 11.5 kg (25.35 lbs)
Standard package: 304.8 m (1000 ft)

Electrical

Frequency, MHz	RL	Attenuation, dB	NEXT, dB	PSNEXT, dB	ELFEXT, dB	PSELFEXT, dB
0.772	-	1.8	67.0	64.0	-	-
1.0	20.0	2.0	65.3	62.3	63.8	60.8
4.0	23.0	4.0	56.3	53.3	51.7	48.7
8.0	24.5	5.8	51.8	48.8	45.7	42.7
10.0	25.0	6.5	50.3	47.3	43.8	40.8
16.0	25.0	8.2	47.3	44.3	39.7	36.7
20.0	25.0	9.3	45.8	42.8	37.7	34.7
25.0	24.3	10.4	44.3	41.3	35.8	32.8
31.25	23.6	11.7	42.9	39.9	33.9	30.9
62.5	21.5	17.0	38.4	35.4	27.8	24.8
100.0	20.1	22.0	35.3	32.3	23.8	20.8

Technical

Max conductor resistance at 20°C (68°F)	9.38Ω/100m (2.86Ω/100ft)
Max Resistance Unbalance	5%
Max pair-to-ground capacitance unbalance	330pF/100m (101pF/100ft)
Characteristic Impedance at 0.772-100 MHz	85Ω-115Ω
Mutual capacitance	5.6nF/m (1.7nF/ft)
Spark Test	2.5kV

Ordering

HI5EFSM-C	i-Net Networks Horizontal Cable Category5e F/UTP Solid 24AWG 4-Pair Milky Gray PVC
C	C-PVC, L-LSZH