

# i-Net Networks Category5e SF/UTP Solid Cable



Conductor diameter: 0.51 mm (0.02") (24 AWG)

Insulated conductor diameter: 0.93±0.2 mm (0.036"±0.008")

Outer cable diameter: 5.6±0.2 mm (0.22"±0.008")

Jacket thickness: 0.4 mm (0.0157")

Minimum bend radius:

8xØ (installation), 6xØ (vertical cabling), 4xØ (horizontal cabling)

Conductor elongation: 14% minimum Drain wire diameter: 0.5 mm (0.019")

Operating temperature: -4°F to +167°F (-20°C to +75°C)

Weight per 1000 ft (304.8 m): 12.5 kg (26.89 lbs)

Standard package: 304.8 m (1000 ft)

## 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 25% or 5 mm (0.19"), thickness -0.025 mm (0.001"), width-20 mm (0.78"), and braid of 16

tinned Copper wires

### **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

5%

#### **Technical**

Max conductor resistance at 20°C (68°F) 9.38 $\Omega$ /100m (2.9 $\Omega$ /100ft)

Max Resistance Unbalance

Max pair-to-ground capacitance unbalance 330pF/100m (101pF/100ft)

Characteristic Impedance at 0.772-100 MHz  $85\Omega-115\Omega$ 

Mutual capacitance 5.6nF/m (1.7nF/ft)

Spark Test 2.5kV

# Ordering

HI5ESSM-C i-Net Networks Horizontal Cable Category5e SF/UTP Solid 24AWG 4-Pair Milky Gray PVC

C C-PVC, L-LSZH