DH-PFM920I-5EU-U-100

UTP CAT5e Cable



- 100m (328ft)/carton UTP CAT5e, power over Ethernet, compatible with one cable
- High-purity oxygen-free copper conductor material
- Customized PVC outer sheath; ANSI UL CM flame retardant class certified
- Top-notch Quality Commitment for 10 Years

System Overview

Network cables are the most commonly used transmission mediums in generic cabling system. It is usually composed of 4 pairs of twisted wires, and is generally applied in system cabling within 100 meters.

Technical Specification

Conductor

Material	Oxygen free copper (99.97% purity)
Diameter	0.50 mm ± 0.01 mm (0.0197"±0.0004")
American Wire Gauge	24AWG

Insulation

Material	HDPE
Min. Average Thickness	0.18 mm (0.0071")
Diameter	0.90 mm ± 0.1mm (0.0354"±0.004")
Color (4 Pairs)	Blue, white/blue; orange, white/orange; green, white/green; brown, white/brown

Rip Cord

Material	Polyester
Specification	500D

Sheath

Material	PVC
Min. Average Thickness	0.50 mm (0.0197")
Diameter	5.10 mm ± 0.30 mm (0.2008"±0.0118")
Color	White

Electrical

Max. DC Resistance of a Single Conductor	9.38Ω/100 m
Min. Insulation Resistance	5000MΩ·km
Max. Mutual Capacitance	5.6nF/100 m
Max. DC Resistance Unbalance	5% (pair intra)
Dielectric Strength	No breakdown with 2.5 kV DC for 2 seconds

Transmission

Characteristic Impedance	100Ω±15Ω
Near End Cross Talk	≥35.30 dB/100 m @100 MHz
Max. Attenuation	22.0 dB/100 m @100 MHz
Return Loss	≥20.1 dB/100 m @100 MHz

Mechanical

Tensile Strength	Sheath≥13.8 MPa, insulation≥16.5 MPa
Elongation at Break	Sheath≥100%, insulation≥300%
Installation Bending Radius	>8 times of outer cable diameter
Conductor Elongation at Break	≥10%

Environmental

Shrinkage of Insulation	≤6%
Color Migration Resistance of Insulation	No migration
Sheath Tensile Strength and Elongation at Break after Aging	≥11.73 MPa, ≥50%
Low Temperature Bending Test	No cracking after the test

Heat Shock Test	No cracking after the test
Operating Temperature	–20°C to +60°C (–4°F to 140°F)
Installation Temperature	0°C to +50°C (32°F to 122°F)
Storage Temperature and Humidity	–10°C to +40°C (14°F to 104°F), <60% (RH)

Security

Vertical Fire Propagation Test	Comply with UL1685 (without smoke measurements)

Packaging

Cable Length	100.0 m (328.08 ft)±1 m (3.28 ft)
Inner Carton Dimensions	250 mm × 111 mm × 250 mm (9.84" × 4.37" × 9.84") (L × W × H)
Net Weight	2.9 kg±0.3 kg (6.39 lb±0.66 lb)
Gross Weight	3.2 kg±0.3 kg (7.05 lb±0.66 lb)
Packaging Dimensions	523 mm × 245 mm × 280 mm (20.59" × 9.65" × 11.02") (L × W × H)
Packaging Method	100 m/carton, 4 inner cartons in one package

Compliance

Executive Standards	ANSI/TIA 568-C.2-2009, UL444-2008

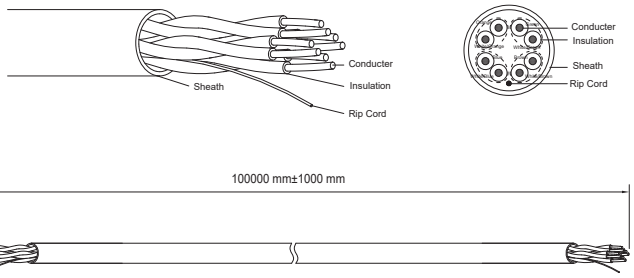
Certification

Certification	UL CM

Ordering Information

Type	Model	Description
Network Cable	DH-PFM920I-5EU-U-100	UTP CAT5e Cable

Dimensions (mm/inch)



Transmission Characteristics (100 m at 20°C) (328.08 ft at 68°F)

Frequency (MHz)	Phase delay ≤ ns	IL ≤ dB	NEXT ≥ dB	PS NEXT ≥ dB
1	570	2.0	65.3	62.3
4	552	4.1	56.3	53.3
8	547	5.8	51.8	48.8
10	545	6.5	50.3	47.3
16	543	8.2	47.2	44.2
20	542	9.3	45.8	42.8
25	541	10.4	44.3	41.3
31.25	540	11.7	42.9	39.9
62.5	539	17.0	38.4	35.4
100	538	22.0	35.3	32.3
ACRF ≥ dB	PS ACRF ≥ dB	RL ≥ dB	Delay skew ≤ ns	Zc (Ω)
63.8	60.8	20.0	45.0	100±15
51.8	48.8	23.0		
45.7	42.7	24.5		
43.8	40.8	25.0		
39.7	36.7	25.0		
37.8	34.8	25.0		
35.8	32.8	24.3		
33.9	30.9	23.6		
27.9	24.9	21.5		
23.8	20.8	20.1		

Note:
Executive standard for the above parameters: ANSI/TIA-568-C.2-2009

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