

DH-PFM920C-A1

100m UTP CAT5e Cable



- 100 m (325 ft)/roll UTP CAT5e, power over Ethernet, compatible with one cable
- High-purity oxygen-free copper conductor
- Customized PVC outer sheath; CE CPR Eca flame retardant class certified
- 10-year warranty

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	0.45 mm ± 0.01 mm

Insulation

Material	HDPE
Min. Average Thickness	0.18 mm
Diameter	0.81mm±0.1mm
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	0.5 mm
Diameter	4.7 mm ± 0.3 mm
Color	White

Electrical

Max. DC Resistance of a Single Conductor	12Ω/100 m
Min. Insulation Resistance	5000MΩ·km
Max. DC Resistance Unbalance	2% (pair intra), 4% (pairs inter)
Dielectric Strength	No breakdown with 1KV DC for 1 min

Transmission

Characteristic Impedance	100 ± 15Ω
Near End Cross Talk	≥35.30 dB/100 m@100 MHz
Max. Attenuation	24.2 dB/100 m@100 MHz
Return Loss	≥20.1 dB/100 m@100 MHz

Mechanical

Tensile Strength	Sheath≥13.5 MPa, insulation≥16 MPa
Elongation at Break	Sheath≥150%, insulation≥300%
Installation Bending Radius	>8 times of outer cable diameter
Conductor Elongation at Break	≥10%

Environmental

Shrinkage of Insulation	≤5%
Color Migration Resistance of Insulation	No migration
Sheath Tensile Strength and Elongation at Break after Aging	≥12.5 MPa, ≥100%
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 IEC 60332-1-2
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Packaging

Cable Length	100 m (325ft)
Dimension	150mm*220mm*105mm(5.90"*8.66"*4.13")
Weight	2.5kg±0.2 kg (5.51lb±0.44lb)

Compliance

Executive Standards	Q/DXJ 067-2019, EN50575-2014
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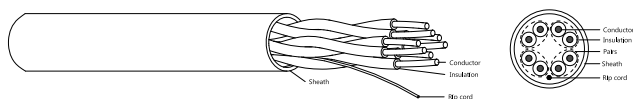
Certification

Certification	CPR Eca, RCM
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Ordering Information

Type	Model	Description
Network Cable	DH-PFM920C-A1	100m 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	TCL ≥ dB*	EL TCTL ≥ dB*	NEXT ≥ dB	PS NEXT ≥ dB
1	n/s	n/s	50.0	35.0	n/s	n/s
4	552.0	4.5	44.0	23.0	56.3	53.3
8	547.0	6.4	41.0	16.9	51.8	48.8
10	545.0	7.2	40.0	15.0	50.3	47.3
16	543.0	9.0	38.0	10.9	47.2	44.2
20	542.0	10.2	37.0	9.0	45.8	42.8
25	541.0	11.4	36.0	7.0	44.3	41.3
30*	540.6	12.6	35.2	5.5	43.1	40.1
31.25	540.0	12.9	35.1	n/s	42.9	39.9
62.5	539.0	18.7	32.0	n/s	38.4	35.4
100	538.0	24.2	30.0	n/s	35.3	32.3
Frequency (MHz)	EL FEXT ≥ dB	PS EL FEXT ≥ dB	RL ≥ dB	Delay skew ≤ ns	Zc(Ω)	
1	n/s	n/s	n/s	n/s	n/s	
4	52.0	49.0	23.0	45.0	100±15	
8	45.9	42.9	24.5			
10	44.0	41.0	25.0			
16	39.9	36.9	25.0			
20	38.0	35.0	25.0			
25	36.0	33.0	24.3			
30*	34.5	31.5	23.8			
31.25	34.1	31.1	23.6			
62.5	28.1	25.1	21.5			
100	24.0	21.0	20.1			

Note:
 Executive standard for the above parameters: Q/DXJ 067-2019
 "n/s"=Not Specified
 "*"="Unless otherwise customer stated the test results default to not shown in test report but comply with standard"