DH-PFM920I-6U-C-100

UTP CAT6 Cable



- 100 m (328 ft)/carton UTP CAT6, power over Ethernet, compatible with one cable
- High-purity oxygen-free copper conductor material
- Customized PVC outer sheath; CE CPR Eca 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	0.57 mm ± 0.01 mm (0.0224"±0.0004")
American Wire Gauge	23AWG

Insulation

Material	HDPE
Min. Average Thickness	0.21 mm (0.0083")
Diameter	1.0 mm ± 0.1 mm (0.0394"±0.004")
Color (4 Pairs)	Blue, white/blue; orange, white/orange; green, white/green; brown, white/brown

Separator

Material	PE
Specification	Translucent 4.5 mm × 0.4 mm (0.1772" ± 0.0157")

Rip Cord

Material	Polyester
Specification	500D

Sheath

Material	PVC
Min. Average Thickness	0.5 mm (0.0197")
Diameter	6.3 mm ± 0.3 mm (0.2480"±0.0118")
Color	White

Electrical

Max. DC Resistance of a Single Conductor	7.5Ω/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 Ω ± 15 Ω
Near End Cross Talk	≥39.30 dB/100 m @250 MHz
Max. Attenuation	33 dB/100 m @250 MHz
Return Loss	≥17.3 dB/100 m @250 MHz

Mechanical

Tensile Strength	Sheath≥9 MPa, insulation≥16 MPa
Elongation at Break	Sheath≥100%, insulation≥100%
Installation Bending Radius	>8 times of outer cable diameter
Conductor Elongation at Break	≥8%

Environmental

Shrinkage of Insulation	≤5%
Color Migration Resistance of Insulation	No migration
Sheath Tensile Strength and Elongation at Break after Aging	≥6.3 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

Packaging

Cable Length	100.0 m (328.08 ft) ±1 m (3.28 ft)
Inner Carton Dimensions	286 mm × 119 mm × 289 mm (11.26" × 4.69" × 11.38") (L × W × H)
Net Weight	4.2 kg ± 0.3 kg (9.26 lb±0.66 lb)
Gross Weight	4.5 kg ± 0.3 kg (9.92 lb±0.66 lb)
Packaging Dimensions	595 mm × 310 mm × 270 mm (23.43" × 12.20" × 10.62") (L × W × H)
Packaging Method	100 m/carton, 4 inner cartons in one package

Compliance

Executive Standards	ISO/IEC 11801-1-2017, IEC 61156-5-2009

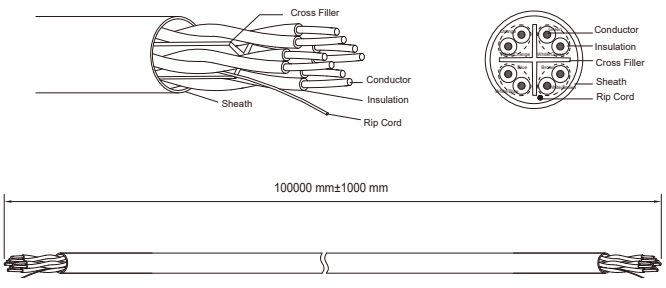
Certification

Certification	CPR Eca

Ordering Information

Type	Model	Description
Cable Series	DH-PFM920I-6U-C-100	UTP CAT6 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
1	n/s	n/s	50.0	35.0	n/s
4	552.0	3.8	44.0	23.0	66.3
8	547.0	5.4	41.0	16.9	61.8
10	545.0	6.0	40.0	15.0	60.3
16	543.0	7.6	38.0	10.9	57.2
20	542.0	8.5	37.0	9.0	55.8
25	541.0	9.6	36.0	7.0	54.3
30*	540.6	10.5	35.2	5.5	53.1
31.25	540.0	10.7	35.1	n/s	52.9
62.5	539.0	15.5	32.0	n/s	48.4
100	538.0	19.9	30.0	n/s	45.3
200	537.0	29.1	27.0	n/s	40.8
250	536.0	33.0	26.0	n/s	39.3
PS NEXT ≥ dB	EL FEXT ≥ dB	PS EL FEXT ≥ dB	RL ≥ dB	Delay skew ≤ ns	Zc (Ω)
n/s	n/s	n/s	n/s	n/s	n/s
63.3	56.0	53.0	23.0	45.0	100±15
58.8	49.9	46.9	24.5		
57.3	48.0	45.0	25.0		
54.2	43.9	40.9	25.0		
52.8	42.0	39.0	25.0		
51.3	40.0	37.0	24.3		
50.1	38.5	35.5	23.8		
49.9	38.1	35.1	23.6		
45.4	32.1	29.1	21.5		
42.3	28.0	25.0	20.1		
37.8	22.0	19.0	18.0		
36.3	20.0	17.0	17.3		

Note:Executive standard for the above parameters: ISO/IEC 11801-1-2017
"n/s"=Not Specified
"*"=Unless otherwise customer stated the test results default to not shown in test report but comply with standard

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