DH-PFM920I-6UN-C-B

UTP CAT6 Cable

- 305 m (1000 ft)/carton UTP CAT6, 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	0.53 mm ± 0.01 mm

Insulation

Material	HDPE
Min. Average Thickness	0.21 mm
Diameter	0.95 mm ± 0.1 mm
Color (4 Pairs)	Blue, white/blue; orange, white/orange; green, white/green; brown, white/brown

Separator

Material	PE
Specification	Translucent 4.5 × 0.4 mm

Rip Cord

Material	Polyester
Specification	500D

Sheath

Material	PVC
Min. Average Thickness	0.5 mm
Diameter	6.0 mm ± 0.3 mm
Color	blue

Electrical

Max. DC Resistance of a Single Conductor	8.7Ω/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	≥39.30 dB/100 m@250 MHz
Max. Attenuation	34.8 dB/100 m@250 MHz
Return Loss	≥17.3 dB/100 m@250 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

Packaging

Cable Length	305.0 m (1000.66 ft) ± 1.5 m (4.92 ft)
Inner Carton Dimensions	416.0 mm × 412.0 mm × 220.0 mm (16.38" × 16.22" × 8.66") (L × W × H)
Packaging Method	305.0 m (1000.66 ft) a carton, one master carton with 2 inner cartons
Net Weight	≥10.5 kg (23.15 lb)
Gross Weight	≥11.5 kg (25.35 lb)

Compliance

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

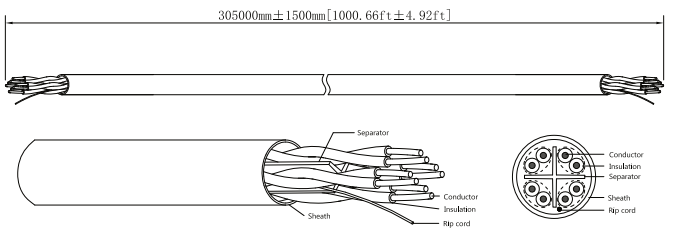
Certification

Certification	CPR Eca

Ordering Information

Type	Model	Description
Network Cable	DH-PFM920I-6UN-C	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	PS NEXT ≥ dB
1	n/s	n/s	50.0	35.0	n/s	n/s
4	552.0	4.0	44.0	23.0	66.3	63.3
8	547.0	5.6	41.0	16.9	61.8	58.8
10	545.0	6.4	40.0	15.0	60.3	57.3
16	543.0	8.1	38.0	10.9	57.2	54.2
20	542.0	9.0	37.0	9.0	55.8	52.8
25	541.0	10.1	36.0	7.0	54.3	51.3
30 ·	540.6	11.0	35.2	5.5	53.1	50.1
31.25	540.0	11.3	35.1	n/s	52.9	49.9
62.5	539.0	16.3	32.0	n/s	48.4	45.4
100	538.0	21.0	30.0	n/s	45.3	42.3
200	537.0	30.7	27.0	n/s	40.8	37.8
250	536.0	34.8	26.0	n/s	39.3	36.3

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	56.0	53.0	23.0	45.0	100±15
8	49.9	46.9	24.5		
10	48.0	45.0	25.0		
16	43.9	40.9	25.0		
20	42.0	39.0	25.0		
25	40.0	37.0	24.3		
30 ·	38.5	35.5	23.8		
31.25	38.1	35.1	23.6		
62.5	32.1	29.1	21.5		
100	28.0	25.0	20.1		
200	22.0	19.0	18.0		
250	20.0	17.0	17.3		

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