

DH-PFM923I-6U-C

305m U/UTP CAT6 Network Cable (White,LSZH,CPR Eca)



- 305 m (1,000 ft)/carton U/UTP CAT6, power over Ethernet, compatible with one cable.
- High-purity oxygen-free copper conductor.
- Customized LSZH outer sheath;CE CPR Eca flame retardant class certified.
- 10-year warranty.

Series 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)
Conductor Structure	0.57 mm $\pm$ 0.01 mm (0.0224" $\pm$ 0.0004")
American Wire Gauge	23AWG

Insulation

Insulating Material	HDPE
Min. Average Thickness	0.21 mm (0.0083")
Insulation Diameter	1.0 mm $\pm$ 0.1 mm (0.04" $\pm$ 0.0004")
Insulation Color	8 cores, Blue, white/blue; Orange, white/orange; Green, white/green; Brown, white/brown

Rip Cord

Material	Polyester
Specification	500D

Separator

Material	PE
Specification	Translucent 4.5 mm $\times$ 0.4 mm (0.18" $\times$ 0.0157")

Sheath

Min. Average Thickness	0.5 mm (0.02")
Sheath Material	PVC

Sheath Diameter	6.3 mm $\pm$ 0.50 mm (0.25" $\pm$ 0.0197")
Sheath Color	White

Electrical

Max. DC Resistance of a Single Conductor	7.5 Ω @100 m (328.08 ft)
Min. Insulation Resistance	5000 M Ω -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 $\pm$ 15 Ω
Near-end Crosstalk	$\geq$ 39.3 dB/100 m@250 MHz
Max. Attenuation	32.8 dB/100 m@250 MHz
Return Loss	$\geq$ 17.3 dB/100 m@250 MHz

Mechanical

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

Environmental

Shrinkage of Insulation	$\leq$ 5%
Color Migration Resistance of Insulation	No migration
Sheath Tensile Strength and Elongation at Break after Aging	$\geq$ 12.5 MPa, $\geq$ 125%

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	−10 °C to +40 °C (+14 °F to +104 °F)
Storage Humidity	<60% (RH)

Security

Vertical Flame Test	Comply with IEC 60332-1-2
---------------------	---------------------------

Packaging

Cable Length	305.0 m± 2 m (1,000.66 ft ± 6.56 ft)
Packaging Method	305 m (1,000 ft) a carton, one carton with 2 inner cartons
Packaging Dimensions	416 mm × 412 mm × 220 mm (16.38" × 16.22" × 8.66") (L × W × H)
Transport Package Dimensions	467 mm × 437 mm × 441 mm (18.39" × 17.20" × 17.36") (L × W × H)
Net Weight	12.4 kg ± 0.5 kg (27.34 lb ± 1.10 lb)
Gross Weight	13.4 kg ± 0.5 kg (29.54 lb ± 1.10 lb)

Compliance Standard

Compliance Standard	ISO/IEC 11801, EN50575
---------------------	------------------------

Certifications

Certifications	CPR Eca
----------------	---------

Flame-retardant Standard

Compliance Standard	EN50575
---------------------	---------

Ordering Information

Type	Model	Description
Network Cable	DH-PFM923I-6U-C	305m U/UTP CAT6 Network Cable (White,LSZH,CPR Eca)

Dimensions (mm[inch])

