

# DH-PFM920-6UN

305m Outdoor U/UTP CAT6 Network Cable (Black, PE sheath)



- 305 m (1000 ft)/carton Outdoor U/UTP CAT6, power over Ethernet, compatible with one cable.
- High-purity oxygen-free copper conductor material.
- Customized PE outer sheath, certain degree of waterproof. Environmentally friendly and all materials used are RoHS compliant.
- 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 | 0.53 mm $\pm$ 0.02 mm (0.02" $\pm$ 0.0008") |
| American Wire Gauge | 24AWG                                       |

### Insulation

|                        |   |
|------------------------|---|
| Insulating Material    | HDPE  |
| Min. Average Thickness | 0.21 mm (0.0083")   |
| Insulation Diameter    | 0.95 mm $\pm$ 0.06 mm (0.04" $\pm$ 0.0024")   |
| Insulation Color       | 8 cores, Blue, white/blue; Orange, white/orange; Green, white/green; Brown, white/brown |

### Rip Cord

|               |                 |
|---------------|-----------------|
| Material      | Polyester       |
| Specification | 3 $\times$ 150D |

### Separator

|               |                                  |
|---------------|----------------------------------|
| Material      | PE                               |
| Specification | Translucent 4.3 $\times$ 0.35 mm |

### Inner Sheath

|                        |                 |
|------------------------|-----------------|
| Material               | PVC             |
| Min. Average Thickness | 0.45 mm (0.02") |

|          |   |
|----------|---|
| Diameter | 5.6 mm $\pm$ 0.4 mm (0.22" $\pm$ 0.02") |
| Color    | White                                   |

### Sheath

|                        |   |
|------------------------|---|
| Min. Average Thickness | 0.5 mm (0.02")                          |
| Sheath Material        | MDPE                                    |
| Sheath Diameter        | 6.8 mm $\pm$ 0.4 mm (0.27" $\pm$ 0.02") |
| Sheath Color           | Black                                   |

### Electrical

|  |                                    |
|--|------------------------------------|
| Max. DC Resistance of a Single Conductor | 9.5 $\Omega$ @100 m (328.08 ft)    |
| Min. Insulation Resistance               | 5000 M $\Omega$ -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 $\Omega$ $\pm$ 15 $\Omega$ |
| Near-end Crosstalk       | $\geq$ 39.30 dB/100 m@250 MHz  |
| Max. Attenuation         | 34.8 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                                     | ≤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   | −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         | 433 mm × 433 mm × 230mm (17.05" × 17.05" ×9.06") (L × W × H)  |
| Transport Package Dimensions | 495 mm × 457mm × 466mm (19.49" × 17.99" × 18.35") (L × W × H) |
| Net Weight                   | 13.5 kg ± 0.6 kg (29.76 lb ± 1.32 lb)                         |
| Gross Weight                 | 14.5 kg ± 0.6 kg (31.97 lb ± 1.32 lb)                         |

Compliance Standard

|                     |                |
|---------------------|----------------|
| Compliance Standard | Q/DXJ 067-2024 |
|---------------------|----------------|

Ordering Information

| Type          | Model         | Description  |
|---------------|---------------|--|
| Network Cable | DH-PFM920-6UN | 305m Outdoor U/UTP CAT6 Network Cable (Black, PE sheath) |

Dimensions (mm[inch])

