# DH-PFM920I-6UN-C

## 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

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|---|---|
| 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 (16.37" × 16.22" × 8.66") (L × W × H) |
| Packaging Method | 305.0 m (1000.66 ft) a carton, one protection carton with 2 cartons inside |
| Net Weight | ≥10.5 kg (23.15 lb) |
| Gross Weight | ≥12.8kg（28.22lb） |

### Compliance

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

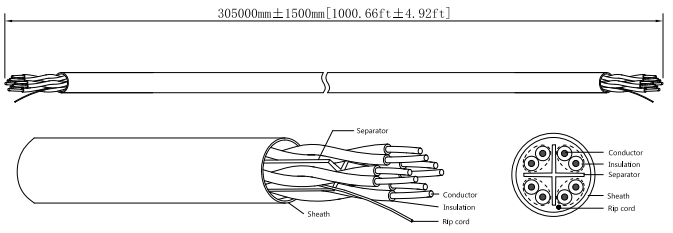
### Certification

| | |
|---|---|
| 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

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