

PowerCat 6 Cable

U/UTP LSOH

Molex PowerCat 6 4 Pair U/UTP LSOH Cable has been designed to support high speed data transmission systems such as Gigabit Ethernet. The cable is part of the PowerCat 6 range of products that are designed to comply with the Category 6 specification.

We recommend that the full range of PowerCat 6 products are used in a system to maximize cabling performance, providing extended frequency response and enhanced bandwidth.



FEATURES AND ADVANTAGES

Enhanced performance 4 pair LSOH cable

Category 6 compliant

Color coded for ease of termination

500 meter and 305 meter reel

RoHS Compliant

Reaction to Fire Euroclass: Dca-s2,d2,a1

SPECIFICATIONS

Commercial Standards

ISO/IEC 11801, EIA/TIA -568-C.2,
EN 50173-1:2011, IEC 61156-5,
IEC 60332-1-2 (332.1), EN50288-5,

Fire Propagation Tests

EU Regulation 305/2011 (CPR)
EN 50575:2014+A:2016
Euroclass: Dca-s2,d2,a1
DoP No: MLXCES-2018-C-031
located on web

<https://www.molexces.co.uk/about-us/our-compliance/cpr/dop-certificates/>

Technical Information

Mechanical Characteristics

Conductor Size: 23 AWG
Primary Insulation: HDPE
Sheath Type: LSOH
External O.D.: 6.2mm +/-0.4mm
Sheath Color: Violet RAL4005

Average NVP%: 69%

Maximum Pulling Force: 100N

Electrical/Optical Characteristics

1.0-250.0MHz Impedance (Ω): 100±15

1.0-250.0MHz Delay Skew: (ns/100m) ≤45

DC Resistance (Ω /100m) max.: 9.38

DC Conductor Resistance Unbalance (%):
Maximum 5.0

Shipping weight

500m reel: 22.5kg

305m box: 14.9k

PoE

Our PowerCat 6 system is suitable for PoE applications as defined below:

IEEE 802.3bt from Type 1 to Type 4, and
CISCO UPoE+

Notes:

For new installations of PoE Type 3 / Class 5 and above that wish to be eligible for the Molex 25 year Application Assurance Warranty, we require Category 6A cable to be used throughout.

To confirm your PoE / RP3 cabling design is eligible for the Molex 25 year Application Assurance Warranty, your design must be verified and validated with the Molex PoE Calculator. Read more

<https://www.molexces.com/poe-calculator>

Molex recommends that the PoE feature on an individual switch port are power disabled prior to unplugging the associated powered Device.

Molex recommends that the full range of PowerCat 6 products be used in a system to maximize cabling and PoE performance. Details on Molex requirements for Warranty can be found at

<https://www.molexces.com/about-us/our-warranty/>

www.molexces.com/products/copper/outlets/

PowerCat 6 Cable U/UTP LS0H

TECHNICAL PERFORMANCE (100) (20):

| Frequency (MHz) | RL ≥dB | ATT ≤dB | NEXT ≥dB | PHASE DELAY ≤ns | PSNEXT ≥dB | ELFEXT ≥dB | PSELFEXT ≥dB |
|-----------------|--------|---------|----------|-----------------|------------|------------|--------------|
| 1 | 20.00 | - | 74.30 | 570.00 | 72.30 | 67.80 | 64.80 |
| 4 | 23.00 | 3.78 | 65.30 | 552.00 | 63.30 | 55.80 | 52.80 |
| 8 | 24.50 | 5.32 | 60.80 | 546.73 | 58.80 | 49.70 | 46.70 |
| 10 | 25.00 | 5.95 | 59.30 | 545.38 | 57.30 | 47.80 | 44.80 |
| 16 | 25.00 | 7.55 | 56.20 | 543.00 | 54.20 | 43.70 | 40.70 |
| 20 | 25.00 | 8.47 | 54.80 | 541.20 | 52.80 | 41.80 | 38.80 |
| 25 | 24.30 | 9.51 | 53.30 | 541.20 | 51.30 | 39.80 | 36.80 |
| 31.25 | 23.60 | 10.67 | 51.90 | 540.44 | 49.90 | 37.90 | 34.90 |
| 62.5 | 21.50 | 15.38 | 47.70 | 538.55 | 45.40 | 31.90 | 28.90 |
| 100 | 20.10 | 19.80 | 44.30 | 537.60 | 42.30 | 27.80 | 24.80 |
| 200 | 18.00 | 28.98 | 39.80 | 536.54 | 37.80 | 21.80 | 18.80 |
| 250 | 17.30 | 32.85 | 38.30 | 536.27 | 36.30 | 19.80 | 16.80 |

ORDERING INFORMATION

| Order No. | SAP No. | Description |
|-----------|-----------|---|
| CAA-00325 | 181740057 | PowerCat 6 U/UTP LS0H Cable Dca-s2,d2,a1 violet 500m reel |
| CAA-00305 | 181740044 | PowerCat 6 U/UTP LS0H Cable Dca-s2,d2,a1 violet 305m box |

www.molex.com/products/copper/outlets/