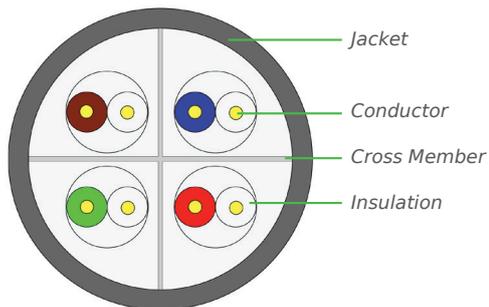


PowerCat 6 U/UTP LS0H Cable Cca-s1a,d1,a1 Easy-pull box >

Molex PowerCat 6 (C6) 4 Pair U/UTP 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.



FEATURES AND ADVANTAGES

Category 6 compliant

Color coded for ease of termination

Supplied on 305m easy-pull boxes

RoHS Compliant

Reaction to Fire Euroclass: Cca-s1a,d1,a1

SPECIFICATIONS

Commercial Standards

ISO 11801:2017,
ANSI/TIA-568.2-D-2018,
IEC 60332-1, IEC 61034-1&2,
IEC 60754-1 & 2

Fire Propagation Tests

EU Regulation 305/2011 (CPR)
EN 50575:2014+A:2016
Euroclass: Cca-s1a,d1,a1

Mechanical

Conductor Size: $0.530 \pm 0.005\text{mm}$
Primary Insulation: Polyethylene
Sheath Type: LS0H
External O.D: $6.0 \pm 0.3\text{mm}$
Sheath Color: Violet RAL4005
Average NVP%: 65% (nom.)
Minimum bend radius: 8 x o.d.
Maximum Pulling force: 100N

Operating Temperature: -15 to +75
Installation Temperature: 0° to + 50°C

Electrical

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

Physical

Shipping weight: 39kg/km

www.molex.com/products/copper/cat6/

PowerCat 6 U/UTP LS0H Cable Cca-s1a,d1,a1 Easy-pull box >

SPECIFICATIONS (CONT.)

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/>

TRANSMISSION PROPERTIES

| Frequency MHz | NEXT dB/100m | Characteristic Impedance Ω | Attenuation dB/100m | RL dB/100m | PS-NEXT dB/100m | ELFEXT dB/100m | PS-ELFEXT dB/100m | Delay ns/100m | Skew ns/100m |
|---------------|--------------|-----------------------------------|---------------------|------------|-----------------|----------------|-------------------|---------------|--------------|
| 1 | 74.3 | 100±15 | 2 | 20 | 72.3 | 68 | 65 | 570 | 45 |
| 4 | 65.3 | | 3.8 | 23 | 63.3 | 56 | 53 | 552 | |
| 10 | 59.3 | | 6 | 25 | 57.3 | 48 | 45 | 545.4 | |
| 16 | 56.2 | | 7.6 | 25 | 54.2 | 43.9 | 40.9 | 543 | |
| 20 | 54.8 | | 8.5 | 25 | 52.8 | 42 | 39 | 542 | |
| 31.25 | 51.9 | | 10.7 | 23.6 | 49.9 | 38.1 | 35.1 | 540.4 | |
| 62.5 | 47.4 | | 15.4 | 21.5 | 45.4 | 32.1 | 29.1 | 538.6 | |
| 100 | 44.3 | | 19.8 | 20.1 | 42.3 | 28 | 25 | 537.6 | |
| 200 | 39.8 | | 29 | 18 | 37.8 | 22 | 19 | 536.5 | |
| 250 | 38.3 | | 32.8 | 17.3 | 36.3 | 20 | 17 | 536.3 | |

ORDERING INFORMATION

| Order No. | SAP No. | Description |
|--------------|-----------|--|
| CAA-00444-VL | 181740188 | PowerCat 6 U/UTP LS0H Cable Cca-s1a,d1,a1, Violet 305m easy-pull box |

www.molexces.com/products/copper/cat6/