

PowerCat 6 4 Pair Bulk Cable UTP LSOH Sheath

Molex PowerCat 6 4 Pair U/UTP Bulk 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

RoHS compliant



SPECIFICATIONS

MECHANICAL

Conductor: 23 AWG Solid bare copper

Conductor Material:

Solid bare copper

Nom. O.D. (mm): 0.550 +/- +0.004

Insulation Material: HDPE

Diameter: 0.98±0.05mm

Sheath

Thickness: 0.55±0.05 mm

External O.D.: 6.1±0.4mm

Material: LSOH

Color: Purple

Nominal Weight: 42.5kg/km

Sheath Physical Properties:

Before Aging Tensile Strength (Mpa):

≥10.0

Elongation(%): ≥125

Aging Period (°C×hrs):

100°C×24h×7d

After Aging Tensile Strength (Mpa):

≥8.0

Elongation(%): ≥=100

Cold bend(-20±2°C×4h):

8×Cable O.D., no visible cracks

Temperature:

Operating: -20°C to +75°C

Storage: -20°C to +75°C

Installation: -10°C to +50°C

ELECTRICAL

NVP (%): 68

At 20°C:

1.0-250.0MHz Impedance ((Ω):
100±15

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

DC Resistance (Ω/100m) max: 9.5

DC Conductor Resistance Unbalance (%) max: 5.0

COMMERCIAL STANDARDS

ISO/IEC 11801

EIA/TIA -568.2-D

IEC 60332-1

IEC 60332-3-22

AS/CA S008:2020

ENVIRONMENTAL STANDARDS

RoHS compliant

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/c6

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SPECIFICATIONS (CONT)

ELECTRICAL

Frequency MHz	Return Loss >dB	Attenuation >dB	NEXT >dB	Phase Delay <ns	PS NEXT >db	ELFEXT >dB	PSELFEXT >dB
1	20.00	2.03	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	542.05	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	Color
CAA-00200	182080413	PowerCat 6 4 Pair Cable, 305m, LS0H, Reel in a Box	Purple
CAA-00200-BK	Consult Molex	PowerCat 6 4 Pair Cable, 305m, LS0H, Reel in a Box	Black
CAA-00200-GY	Consult Molex	PowerCat 6 4 Pair Cable, 305m, LS0H, Reel in a Box	Gray
CAA-00200-BL	Consult Molex	PowerCat 6 4 Pair Cable, 305m, LS0H, Reel in a Box	Blue

www.molex.com/products/copper/c6