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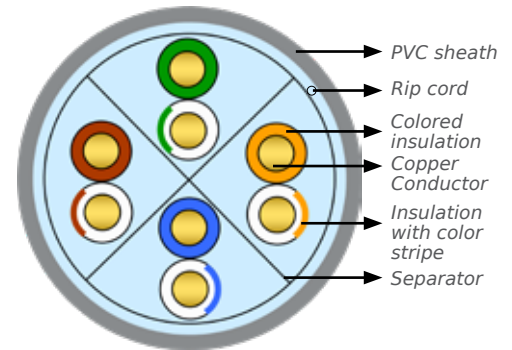
PowerCat 6
4 Pair Bulk Cable UTP ❯

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.

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.

- PVC sheath
- Rip cord
- Colored insulation
- Copper Conductor
- Insulation with color stripe
- Separator

FEATURES AND ADVANTAGES

Compliant to ANSI/TIA-568.2-D Category 6 cable specifications

Supports ultrahigh speed data networks such as Gigabit Ethernet (1000 Base-T & 1000 Base-TX) and beyond

Incorporates central spine maintaining pair separation during installation to ensure premium performance after installation

CM/CMR FRPVC rated cable

Supplied in convenient 305m "Reel in a box"

UL listed

RoHS compliant

SPECIFICATIONS

Commercial Standards
ANSI/TIA-568.2-D
ISO/IEC 11801
IEC-60332-1

Approvals
UL Listed
ETL Verified

Construction
Conductor: 23 AWG Solid bare copper
Insulation:
High Density Polyethylene Solid
Pairs:
2 Insulated conductors twisted together
Sheath: CM rated PVC
Cable Diameter: 6.0 +/- 0.2mm

Mechanical
Bending Radius:
< 4 X Cable Diameter at –20°C ± 1°C
Pulling Force: 11.5kg
Temperature Range: -20° to +70°C

Electrical
Conductor Resistance:
< 9.38 Ohm/100m
Mutual Capacitance: < 5.6nF/100m
Resistance Unbalance: 5% Max
Capacitance Unbalance: 330pF/100m
Delay Skew: < 45nS

Physical
Color code
Pair 1-2: White-Orange Stripe and Orange
Pair 3-6: White-Green Stripe and Green
Pair 4-5: White-Blue Stripe and Blue
Pair 7-8: White-Brown Stripe and Brown

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

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PowerCat 6
4 Pair Bulk Cable UTP ❯

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/

Frequency MHz	Insertion Loss dB/100m	RL dB	NEXT dB	PSNEXT dB	ELFEXT dB	PSELFEXT dB	ACR dB	PSACR dB
1	2.0	20.00	74.30	72.3	67.8	64.8	72.3	70.3
4	3.8	23.00	65.30	63.3	55.8	52.8	61.5	59.5
8	5.3	24.50	60.80	58.8	49.7	46.7	55.5	53.5
10	6.0	25.00	59.30	57.3	47.8	44.8	53.3	51.3
16	7.6	25.00	56.20	54.2	43.7	40.7	48.6	46.6
20	8.5	25.00	54.80	52.8	41.8	38.8	46.3	44.3
25	9.5	24.30	53.30	51.3	39.8	36.8	43.8	41.8
31.25	10.7	23.60	51.90	49.9	37.9	34.9	41.2	39.2
62.5	15.4	21.50	47.40	45.4	31.9	28.9	32.0	30.0
100	19.8	20.10	44.30	42.3	27.8	24.8	24.5	22.5
200	29.0	18.00	39.80	37.8	21.8	18.8	10.8	8.8
250	32.8	17.30	38.30	36.3	19.8	16.8	5.5	3.5

ORDERING INFORMATION

Order No.	SAP No.	Description
CAA-00076	Consult Molex	PowerCat 6 4 Pair Cable, CM Rated, 305m, Reel in a Box - Blue
CAA-00176	Consult Molex	PowerCat 6 4 Pair Cable, CM Rated, 305m, Reel in a Box - Gray
CAA-00394	Consult Molex	PowerCat 6 4 Pair Cable, CMR Rated, 305m, Reel in a Box - Blue
CAA-00076-YL	181740085	PowerCat 6 4 Pair Cable, CM Rated, 305m, Reel in a Box - Yellow
CAA-00076-RD	181740072	PowerCat 6 4 Pair Cable, CM Rated, 305m, Reel in a Box - Red
CAA-00076-GR	181740094	PowerCat 6 4 Pair Cable, CM Rated, 305m, Reel in a Box - Green

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