

PowerCat 6 U/UTP Cable ➤

Molex PowerCat 6 U/UTP cable is a key component of our end-to-end Category 6 solution designed for Gigabit Ethernet support.

FEATURES AND ADVANTAGES

23AWG Conductors

ETL verified to TIA-568C.2 Category 6 standard

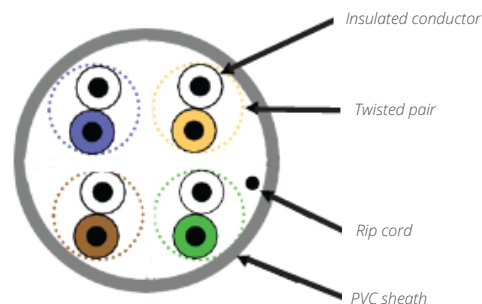
Plenum and Riser

Foot length markers

1000ft REELEX

Splineless for quicker installation

UL & CSA Compliant



SPECIFICATIONS

Commercial Standards

ANSI/TIA-568C.2
PoE: IEEE 802.3bt-2018
UL, CSA approved. File no E316962

Fire Propagation Tests CMP and CMR Listed

Mechanical Characteristics Riser

Conductor: Bare Copper Wire 23AWG
Cable diameter - in. (mm): 0.213 (5.4) Nom.
Nominal weight 1000ft reel - lbs. (kg): Riser: 23.8 (10.8)
Nominal cable weight - lb./kft. (kg/km): 21.6 (32.2)
Maximum installation tension - lb. (N): 25 (110)
Minimum bend radius - in. (mm): ≥ 4 O.D @ -20° C / -4°F
Insulation: Polyethylene

Plenum

Conductor: Bare Copper Wire 23AWG
Cable diameter - in. (mm): 0.209 (5.3) Nom.
Nominal weight 1000ft reel - lb. (kg): 24.9 (11.3)
Nominal cable weight - lb./kft. (kg/km): 23 (34)
Maximum installation tension - lb. (N): 25 (110)
Minimum bend radius: ≥ 4 O.D @ -20° C / -4°F

Operating Temperature: -4°F to 140°F (-20°C to 60°C)

Electrical / Optical Characteristics

Mutual Capacitance: 5.6nF/100 m nom.
DC Resistance Maximum: 9.38 Ω /100 m maximum
Skew: 45 ns/100 m maximum

Pair to Ground Unbalance:

Plenum: 330 pF/100m maximum
Riser: 330 pF/100m maximum
Nominal Velocity of Propagation (NVP): Riser: 67%, Plenum: 69%

Environmental Compliance

RoHS Compliant

Color Code

	Wire 1		Wire 2	
			Either	Or
Pair 1	Blue		White, Blue stripe	White
Pair 2	Orange		White, Orange stripe	White
Pair 3	Green		White, Green stripe	White
Pair 4	Brown		White, Brown stripe	White

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

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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/>

TECHNICAL INFORMATION

Freq. (MHz)	Attenuation (dB/100m) Max.	NEXT (dB/100m) Min.	PSNEXT (dB/100m) Min.	ELFEXT (dB/100m) Min.	PSELFEXT (dB/100m) Min.	RL (dB/100m) Min.	P.Delay (ns/100m) Max.
1	2.0	74.3	72.3	67.8	64.8	20.0	570
4	3.8	65.3	63.3	55.8	52.8	23.0	552
8	5.5	60.8	58.8	49.7	46.7	24.5	547
10	6.0	59.3	57.3	47.8	44.8	25.0	545
16	7.6	56.2	54.2	43.7	40.7	25.0	543
20	8.5	54.8	52.8	41.8	38.8	25.0	542
25	9.5	53.3	51.3	39.8	36.8	24.3	541
31.25	10.7	51.9	49.9	37.9	34.9	23.6	540
62.5	15.4	47.4	45.4	31.9	28.9	21.5	539
100	19.8	44.3	42.3	27.8	24.8	20.1	538
200	29.0	39.8	37.8	21.8	18.8	18.0	537
250	32.8	38.3	36.3	19.8	16.8	17.3	536

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ORDERING INFORMATION

Order No.	SAP No.	Description
CMP Plenum		
CAA-0195P-02	181740024	CBL C6 U/UTP 4PR 23 AWG CMP RLX 1000FT WHITE
CAA-0195P-04	181740060	CBL C6 U/UTP 4PR 23 AWG CMP RLX 1000FT BLACK
CAA-0195P-08	181740025	CBL C6 U/UTP 4PR 23 AWG CMP RLX 1000FT GRAY
CAA-0195P-0N	181740053	CBL C6 U/UTP 4PR 23 AWG CMP RLX 1000FT ORANGE
CAA-0195P-BL	181740023	CBL C6 U/UTP 4PR 23 AWG CMP RLX 1000FT BLUE
CAA-0195P-GR	181740031	CBL C6 U/UTP 4PR 23 AWG CMP RLX 1000FT GREEN
CAA-0195P-PK	181740073	CBL C6 U/UTP 4PR 23 AWG CMP RLX 1000FT PINK
CAA-0195P-PP	181740067	CBL C6 U/UTP 4PR 23 AWG CMP RLX 1000FT PURPLE
CAA-0195P-RD	181740032	CBL C6 U/UTP 4PR 23 AWG CMP RLX 1000FT RED
CAA-0195P-YL	181740030	CBL C6 U/UTP 4PR 23 AWG CMP RLX 1000FT YELLOW
CMR Riser		
CAA-0195R-02	181740027	CBL C6 U/UTP 4PR 23 AWG CMR RLX 1000FT WHITE
CAA-0195R-08	181740028	CBL C6 U/UTP 4PR 23 AWG CMR RLX 1000FT GRAY
CAA-0195R-0N	181740054	CBL C6 U/UTP 4PR 23 AWG CMR RLX 1000FT ORANGE
CAA-0195R-BL	181740026	CBL C6 U/UTP 4PR 23 AWG CMR RLX 1000FT BLUE
CAA-0195R-GR	181740034	CBL C6 U/UTP 4PR 23 AWG CMR RLX 1000FT GREEN
CAA-0195R-RD	181740035	CBL C6 U/UTP 4PR 23 AWG CMR RLX 1000FT RED
CAA-0195R-YL	181740033	CBL C6 U/UTP 4PR 23 AWG CMR RLX 1000FT YELLOW

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