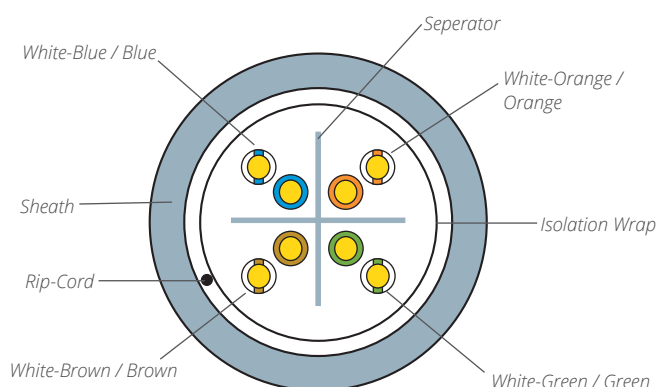


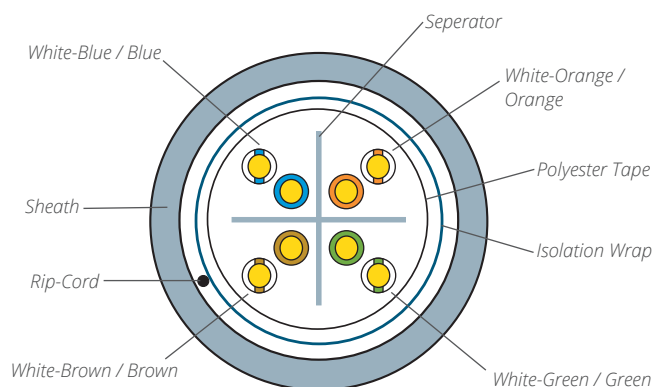
PowerCat 6A UTP CMP/CMR Cable ➤

PowerCat 6A UTP cable is capable of supporting 10GBASE-T applications and features an innovative noise-canceling aluminum/polyester isolation wrap surrounding the core that delivers excellent alien crosstalk (AXT) performance.

The product features a low outside diameter of 0.272" (Plenum) 0.291" (Riser), allowing for easier, more efficient installation and cable management. This also improves density and cooling. PowerCat 6A U/UTP cable is third party verified by ETL for Category 6A component compliance and is ideal for PoE applications requiring higher levels of current and is an excellent choice for high-bandwidth, mission-critical applications and wireless access points.



PowerCat 6A UTP
CMP Cable - PVC Sheath



PowerCat 6A UTP
CMR Cable - PVC Sheath

FEATURES AND ADVANTAGES

Noise canceling insulated metallic isolation wrap surrounds the pairs for AXT protection

Low outside diameter of 0.272" (Plenum) and 0.291" (Riser) allows for improved cable density and handling

High cable density and reduced bend radius lowers installation cost

No grounding or bonding required

ANSI/TIA-568.2-E compliant

ETL verified Category 6A

Ideal for A/V applications up to 100m channel

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PowerCat 6A UTP CMP/CMR Cable

APPLICATIONS

10BASE-T through 10GBASE-T Ethernet

Power over Ethernet (PoE) IEEE 802.3bt-2018

SPECIFICATIONS

Commercial Standards

ANSI/TIA-568.2-E

UL

ETL Verified

Flame Rating:

Plenum NFPA-70, CMP

Riser-NFPA 70, CMR

Environmental Standards

RoHS Compliant

REACH compliant

Mechanical

Tensile Strength

Before Aging: 13.5 Mpa

After Aging: 12.5 Mpa

Electrical

Mutual Capacitance:

CMR (nominal): 5.4nF Ohms/100m

CMP (nominal): 5.4nF Ohms/100m

DC Resistance:

9.38 Ohms/100m maximum

Skew ns/100m maximum: 45

Pair to Ground Unbalance:

330 pF/100m maximum

DC Resistance Unbalance: 5% maximum

Physical

Pair Count: 4

Conductor: Solid Bare Copper

AWG: 23

Cable Diameter:

0.272" (Plenum) and 0.291" (Riser)

Minimum Bend Radius: 8*OD

Jacket: Flame-retardant polymer alloy

Isolation Wrap:

Polyester/Aluminum/Polyester

Operating Temperature:

CMP, CMR: -20 to 75°C

Installation Temperature:

CMP, CMR: -5 to 50°C

PoE

Our PowerCat 6A system is suitable for the most demanding PoE applications:

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

UPoE+

ISO/IEC11801, ANSI/TIA-568.2-E

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 6A 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/>

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PowerCat 6A UTP CMP/CMR Cable

CMP: TECHNICAL PERFORMANCE (100M)

Frequency MHz	RL ≥dB	ATT ≤dB	NEXT ≥dB	DELAY ≤ns	PSNEXT ≥dB	ELFEXT ≥dB	PSELFEXT ≥dB
1	20.0	-	74.3	570.0	72.3	67.8	64.8
4.0	23.0	3.8	65.3	552.0	63.3	55.8	52.8
8.0	24.5	5.3	60.8	546.7	58.8	49.7	46.7
10.0	25.0	5.9	59.3	545.4	57.3	47.8	44.8
16.0	25.0	7.5	56.2	543.0	54.2	43.7	40.7
20.0	25.0	8.4	54.8	542.1	52.8	41.8	38.8
25.0	24.3	9.4	53.3	541.2	51.3	39.8	36.8
31.25	23.6	10.5	51.9	540.4	49.9	37.9	34.9
62.5	21.5	15.0	47.4	538.6	45.4	31.9	28.9
100	20.1	19.1	44.3	537.6	42.3	27.8	24.8
200	18.0	27.6	39.8	536.5	37.8	21.8	18.8
250	17.3	31.1	38.3	536.3	36.3	19.8	16.8
300	16.8	34.3	37.1	536.1	35.1	18.3	15.3
500	15.2	45.3	33.8	535.6	31.8	13.8	10.8

CMR: TECHNICAL PERFORMANCE (100M)

Frequency MHz	RL ≥dB	ATT ≤dB	NEXT ≥dB	PSNEXT ≥dB	ELFEXT ≥dB	PSELFEXT ≥dB	PSANEXT ≥dB	PSAACRF ≥dB
1	20.0	-	74.3	72.3	67.8	64.8	67.0	67.0
4.0	23.0	3.8	65.3	63.3	55.8	52.8	67.0	66.2
8.0	24.5	5.3	60.8	58.8	49.7	46.7	67.0	60.1
10.0	25.0	5.9	59.3	57.3	47.8	44.8	67.0	58.2
16.0	25.0	7.5	56.2	54.2	43.7	40.7	67.0	54.1
20.0	25.0	8.4	54.8	52.8	41.8	38.8	67.0	52.2
25.0	24.3	9.4	53.3	51.3	39.8	36.8	67.0	50.2
31.25	23.6	10.5	51.9	49.9	37.9	34.9	67.0	48.3
62.5	21.5	15.0	47.4	45.4	31.9	28.9	65.6	42.3
100	20.1	19.1	44.3	42.3	27.8	24.8	62.5	38.2
200	18.0	27.6	39.8	37.8	21.8	18.8	58.0	32.2
250	17.3	31.1	38.3	36.3	19.8	16.8	56.5	30.2
300	16.8	34.3	37.1	35.1	18.3	15.3	55.3	28.7
500	15.2	45.3	33.8	31.8	13.8	10.8	52.0	24.2

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PowerCat 6A UTP CMP/CMR Cable

ORDERING INFORMATION

Order No.	SAP No.	Description
Plenum		
CAA-00449P-02	1810030157	CBL C6A U/UTP 4PR 23 AWG CMP 1000FT WHITE TH
CAA-00449P-04	1810030158	CBL C6A U/UTP 4PR 23 AWG CMP 1000FT BLACK TH
CAA-00449P-08	1810030159	CBL C6A U/UTP 4PR 23 AWG CMP 1000FT GRAY TH
CAA-00449P-BL	1810030160	CBL C6A U/UTP 4PR 23 AWG CMP 1000FT BLUE TH
CAA-00449P-GR	1810030161	CBL C6A U/UTP 4PR 23 AWG CMP 1000FT GREEN TH
CAA-00449P-ON	1810030162	CBL C6A U/UTP 4PR 23 AWG CMP 1000FT ORANGE TH
CAA-00449P-PK	1810030116	CBL C6A U/UTP 4PR 23 AWG CMP 1000FT PINK TH
CAA-00449P-PP	1810030163	CBL C6A U/UTP 4PR 23 AWG CMP 1000FT PURPLE TH
CAA-00449P-YL	1810030164	CBL C6A U/UTP 4PR 23 AWG CMP 1000FT YELLOW TH
Riser		
CAA-00450R-02	181740232	CBL C6A U/UTP 4PR 23 AWG CMR 1000FT WHITE TH
CAA-00450R-04	181740233	CBL C6A U/UTP 4PR 23 AWG CMR 1000FT BLACK TH
CAA-00450R-08	181740234	CBL C6A U/UTP 4PR 23 AWG CMR 1000FT GRAY TH
CAA-00450R-BL	181740236	CBL C6A U/UTP 4PR 23 AWG CMR 1000FT BLUE TH
CAA-00450R-GR	181740237	CBL C6A U/UTP 4PR 23 AWG CMR 1000FT GREEN TH
CAA-00450R-ON	181740235	CBL C6A U/UTP 4PR 23 AWG CMR 1000FT ORANGE TH
CAA-00450R-PP	1810030165	CBL C6A U/UTP 4PR 23 AWG CMR 1000FT PURPLE TH
CAA-00450R-YL	181740238	CBL C6A U/UTP 4PR 23 AWG CMR 1000FT YELLOW TH

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