

PowerCat 6 U/UTP C6 Underground Cable ➤

Molex PowerCat C6 U/UTP outdoor, underground cable sheath is manufactured from a HDPE compound that insulates the cores whilst a PE (UV) sheath provides protection against moisture.

An additional nylon outer jacket provides protection against abrasion and termites. The rugged construction of this cable makes it ideal for outdoor/underground installations.



FEATURES AND ADVANTAGES

Category 6 compliant

PE (UV) and nylon sheathed for greater protection

UV resistant

Suitable for outdoor/underground installations

Water resistant gel-filled design.

SPECIFICATIONS

Mechanical

Conductor Size:

Solid 0.58 23 AWG Bare Annealed Copper

Primary Insulation: HDPE

Nominal O.D.: 1.0mm

Sheath Type: Inner: PE(UV), Outer: Nylon

Nominal O.D.:

Overall: 6.1mm, Inner: 0.5mm, Outer: 0.4mm

Operating Temperature: -20°C to +75°C

NVP: 65%

Environmental Standards

Cat 6 ANSI/TIA/EIA-568-B.2-1, ISO/IEC 11801, UL444

Fire Propagation Tests

EU Regulation 305/2011 (CPR)

EN 50575:2014+A:2016

EuroClass: Fca

DoP No: MLXCES-2018-C035

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/cat6

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TRANSMISSION PROPERTIES AND ELECTRICAL SPECIFICATIONS

FREQ (MHz)	RL (dB)	ATT (dB/100m)	NEXT (dB)	PS-NEXT (dB)	ELFEXT (dB)	PS-ELFEXT (dB)	PD (ns/100m)	Upper Characteristic impedance Zu(Ω)	Lower Characteristic impedance Zl(Ω)
1	-	-	74.3	72.3	67.8	64.8	570.0	-	-
4	23.0	3.8	65.3	63.3	55.8	52.8	552.0	115.2	86.8
8	24.5	5.3	60.8	58.8	49.7	46.7	546.7	112.6	88.8
10	25.0	6.0	59.3	57.3	47.8	44.8	545.4	111.9	89.4
16	25.0	7.6	56.2	54.3	43.7	40.7	543.0	111.9	89.4
20	25.0	8.5	54.8	52.8	41.8	38.8	542.0	111.9	89.4
25	24.3	9.5	53.3	51.3	39.8	36.8	541.0	112.9	88.5
31.25	23.6	10.7	51.9	49.9	37.9	34.9	540.0	114.1	87.7
62.5	21.5	15.4	47.4	45.4	31.9	28.9	538.6	118.3	84.5
100	20.1	19.8	44.3	42.3	27.8	24.8	537.6	121.9	82.0
250	18.0	29.0	39.8	37.8	21.8	18.8	536.5	128.8	77.6
							536.3	131.5	76.0

ORDERING INFORMATION

Order No.	SAP No.	Description
CAA-00419-0H	181740138	Cat6 4 Pair U/UTP Gel Filled OSP Cable PE(UV)/Nylon Sheathed

www.molex.com/products/copper/cat6