

CAT-6 UTP Cable

Application

Network and voice application in a standard cabling system, including IEEE802.3 1000 Base-T, 100 Base-Tx, 10 Base-T, 1000 Base-Tx (ANSI/TIA/EIA-854-2001), 155Mb/s ATM, 4/16 Mb/s Token ring etc.

Features

- ▶ Tape design engineered for smaller overall diameter and ease of installation
- ▶ Characterized and tested to 250MHz
- ▶ Positive PSACR up to 300MHz for future bandwidth requirements
- ▶ Every master reel is tested to ensure electrical performance compliance
- ▶ RoHs compliant

Physical Specifications

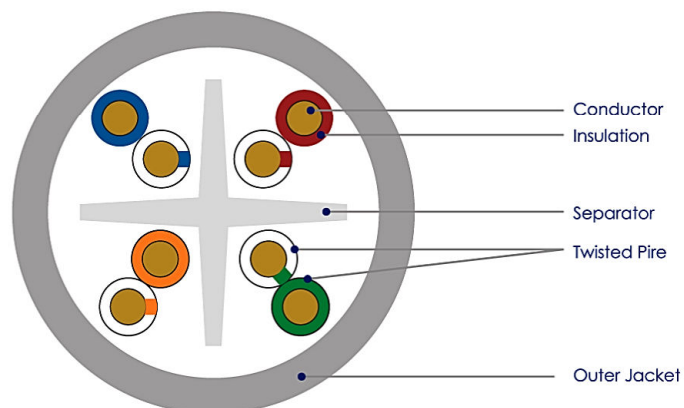
Conductor Size & Material Type	23 AWG Solid Bare Copper
Insulation Material Type Thickness	PE 0.18 mm
No. of Pair / Coverage Type	4 / UTP
Cable Jacket Type Thickness	PVC / LSZH 0.55 mm
Cable Colour Dimension	White/Gray/Blue 6.1 mm



CAT-6 UTP CABLE

Pair Identification

Pair 1	Blue/White-Blue
Pair 2	Orange/White-Orange
Pair 3	Green/White-Green
Pair 4	Brown/White-Brown



Temperature Range

During Installation	-10°C up to +60°C
During Operating	-10°C up to +60°C

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Electrical Specifications

Capacitance unbalance (max.) @ 0.8 or 1 kHz (pF/km)	1600
DC Resistance (max.) Ω/km @ 20°C	95
Resistance unbalance within a pair (max.) (%)	2
Resistance unbalance between pairs (max.) (%)	4
Delay Skew (max.) ns/100m @ 20°C	45
Mean Input impedance @ 100 MHz	100 ± 5 Ω
Dielectric strength	Min 1.0 kVdc or 0.7 kVac for 1 min. Min 2.5 kVdc or 1.7 kVac for 2 secs.

IEC 61156-5 ed2.0 Category 6 cable parameters

Freq. MHz	Ins. Loss (dB/100m)	RL (dB)	Pair to Pair		Power Sum		Po. Delay (ns/100)
			NEXT	ELFEXT	NEXT	ELFEXT	
			(dB/100m)		(dB/100m)		
	Max.	Min.	Min.	Min.	Min.	Min.	Max.
10	6.0	25	60.3	48.0	57.3	45.0	545.4
16	7.6	25	57.2	43.9	54.2	40.9	543.0
20	8.5	25	55.8	42.0	52.8	39.0	542.0
31.25	10.7	25	52.9	38.1	49.9	35.1	540.4
62.5	15.5	23.6	48.4	32.1	45.4	29.1	538.6
100	19.9	20.1	45.3	38.0	42.3	25.0	537.6
200	29.1	18	40.8	28.0	37.8	19.0	536.5
250	33.0	17.3	39.3	20.0	36.3	17.0	536.3

Standard Compliances

- ISO/IEC 11801:2011 (Ed. 2.2)
- EN 50173-1:2011
- EN 50288-3-1:2013
- IEC 61156-5:2012 (Ed. 2.1)
- EN 50173-2:2007
- ANSI/TIA-568-C.2:2009

Certification

- Delta EC

Order Information

Part No	No. of Pairs	Type of Cable	Size of Conductor	Overall Dia. mm	Type of Jacket	Standard Length
CS-C6U4	4	UTP	23AWG	6.2	PVC	305M/Box - 500M/Reel
CS-C6U4	4	UTP	23AWG	6.2	LSZH	305M/Box - 500M/Reel