# CAT6 U/UTP CU

MicroConnect's CAT6 U/UTP CU Ethernet cables are constructed with pure copper strands and 23 AWG, ensuring superior performance and reliability. The outer jacket is made from LSZH (Low Smoke Zero Halogen) material, which minimizes smoke, toxic fumes, and acid gases in case of a fire. These cables feature strain relief and latch protection for a secure connection. Designed without a foil shield, they are suitable for environments with minimal electromagnetic interference (EMI).

Available in various lengths and configurations, MicroConnect offers the ideal CAT6 Ethernet cable to meet your network requirements.

▶ Latch protection

▶ Strain relief

▶ Gold plated RJ45 connectors

25 year warranty
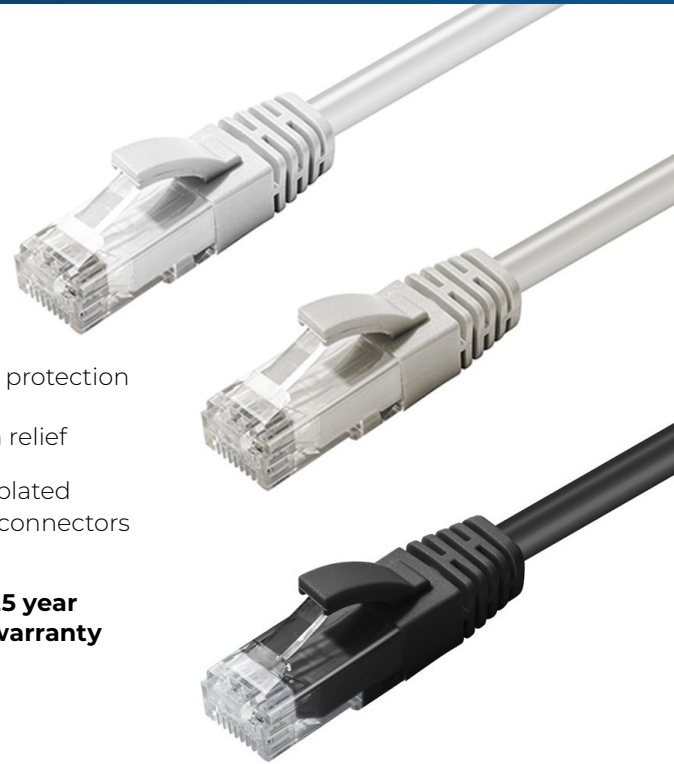
A wide selection of lengths and colors

LENGTH	WHITE	GREY	BLACK	BLUE	PURPLE	RED	ORANGE	YELLOW
0.2 m	UTP6002W	UTP6002	UTP6002S	UTP6002B	UTP6002P	UTP6002R	UTP6002O	UTP6002Y
0.3 m	UTP6003W	UTP6003	UTP6003S	UTP6003B	UTP6003P	UTP6003R	UTP6003O	UTP6003Y
0.4 m	UTP6004W	UTP6004	UTP6004S	–	–	–	–	–
0.5 m	UTP6005W	UTP6005	UTP6005S	UTP6005B	UTP6005P	UTP6005R	UTP6005O	UTP6005Y
1 m	UTP601W	UTP601	UTP601S	UTP601B	UTP601P	UTP601R	UTP601O	UTP601Y
1.5 m	UTP6015W	UTP6015	UTP6015S	UTP6015B	UTP6015P	UTP6015R	UTP6015O	UTP6015Y
2 m	UTP602W	UTP602	UTP602S	UTP602B	UTP602P	UTP602R	UTP602O	UTP602Y
3 m	UTP603W	UTP603	UTP603S	UTP603B	UTP603P	UTP603R	UTP603O	UTP603Y
5 m	UTP605W	UTP605	UTP605S	UTP605B	UTP605P	UTP605R	UTP605O	UTP605Y
7 m	UTP607W	UTP607	UTP607S	UTP607B	UTP607P	UTP607R	UTP607O	UTP607Y
10 m	UTP610W	UTP610	UTP610S	UTP610B	UTP610P	UTP610R	UTP610O	UTP610Y
15 m	UTP615W	UTP615	UTP615S	UTP615B	UTP615P	UTP615R	UTP615O	UTP615Y
20 m	UTP620W	UTP620	UTP620S	UTP620B	UTP620P	UTP620R	–	UTP620Y
25 m	UTP625W	UTP625	–	–	–	–	–	–
30 m	UTP630W	UTP630	–	–	–	–	–	–
40 m	–	UTP640	–	–	–	–	–	–
45 m	–	UTP645	–	–	–	–	–	–
50 m	–	UTP650	–	–	–	–	–	–

Twisted Pair Network Cables

MicroConnect network cables always consists of eight strands twisted into four pairs. The twisting of these pairs, along with an electronically conductive shield, minimizes the likelihood of cross-talk between neighboring conductors within the cable. This design also enhances the cable's resilience to interference from external magnetic fields, which can be generated by nearby electrical cables.
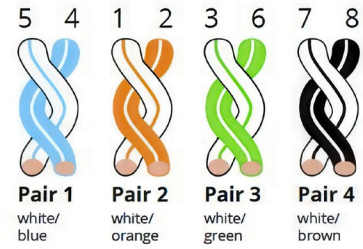
Jacket

MicroConnect offers three primary types of materials for network cable jackets: PVC (Polyvinyl Chloride), PE (Polyethylene), and LSZH, also known as LS0H (Low Smoke Zero Halogen). While PVC cables are softer, more flexible, and easier to handle, LSZH cables are firmer and less flexible due to their flame-retardant composition. The halogen-free jacket of LSZH cables does not emit dangerous gases, smoke, or acid in the event of a fire, making them increasingly essential in systems where protecting people and equipment from toxic and corrosive gases is critical. The PE jacket, on the other hand, is resistant to weathering and UV radiation, making it the preferred choice for outdoor cable systems.
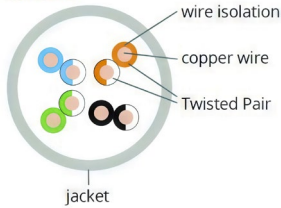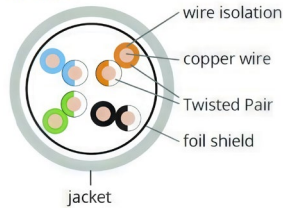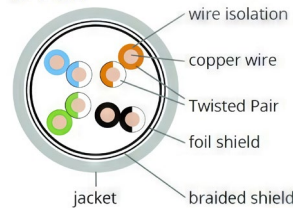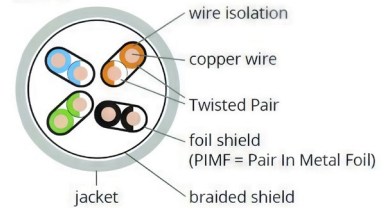

Shielding

There are two primary types of network cables: shielded and unshielded. Unshielded cables typically offer lower transmission quality, especially at high data rates or over long distances. In contrast, shielded cables, often called twisted pairs, are wrapped in a foil screen that protects against electromagnetic interference (EMI). Understanding a cable's shielding is straightforward once knowing the naming convention. The first letter before the slash (/) indicates the shielding of the outer cable jacket: U (unshielded), F (foil shielded), S (braided shield), or SF (braided and foil shielded). The letter after the slash denotes the shielding of the twisted pairs (TP): U (unshielded), F (foil shielded), or S (braided shielded). For example, a U/UTP cable means an unshielded outer jacket with unshielded twisted pairs.

Categories

Twisted pair network cables are categorized into different standards based on their performance, which can be seen in the illustration to the right.

CATEGORY	MAX. DATA RATE	BANDWITH	APPLICATION
CAT 5e	1 Gbps	100 MHz	1 GBase-T
CAT 6	1 Gbps	250 MHz	1 GBase-T, 155-MBit-ATM, 622-MBit-ATM
CAT 6a	10 Gbps	500 MHz	10 GBase-T
CAT 7	10 Gbps	600 MHz	10 GBase-T
CAT 81	25 Gbps	2000 MHz	25 GBase-T