# CAT6 S/FTP CU

MicroConnect's CAT6 S/FTP CU Ethernet cables feature pure copper strands with 28 AWG, delivering high performance and reliable networking. The outer jacket is made from LSZH (Low Smoke Zero Halogen) material, which minimizes smoke, toxic fumes, and acid gases in the event of a fire. These cables include strain relief and latch protection to ensure a secure connection. Designed with a foil shield around each pair and an overall braided shield, they are ideal for environments with significant electromagnetic interference (EMI).

Available in various lengths and configurations, MicroConnect provides the perfect CAT6 Ethernet cable to meet your demanding 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 |
|---|---|---|---|---|---|---|---|---|
| 0.15 m | SSTP60015W | SSTP60015 | SSTP60015S | SSTP60015B | SSTP60015P | SSTP60015R | SSTP60015O | SSTP60015Y |
| 0.25 m | SSTP60025W | SSTP60025 | SSTP60025S | SSTP60025B | SSTP60025P | SSTP60025R | SSTP60025O | SSTP60025Y |
| 0.5 m | SSTP6005W | SSTP6005 | SSTP6005S | SSTP6005B | SSTP6005P | SSTP6005R | SSTP6005O | SSTP6005Y |
| 1 m | SSTP601W | SSTP601 | SSTP601S | SSTP601B | SSTP601P | SSTP601R | SSTP601O | SSTP601Y |
| 1.5 m | SSTP6015W | SSTP6015 | SSTP6015S | SSTP6015B | – | SSTP6015R | SSTP6015O | SSTP6015Y |
| 2 m | SSTP602W | SSTP602 | SSTP602S | SSTP602B | SSTP602P | SSTP602R | SSTP602O | SSTP602Y |
| 3 m | SSTP603W | SSTP603 | SSTP603S | SSTP603B | SSTP603P | SSTP603R | SSTP603O | SSTP603Y |
| 5 m | SSTP605W | SSTP605 | SSTP605S | SSTP605B | SSTP605P | SSTP605R | SSTP605O | SSTP605Y |
| 7 m | SSTP607W | SSTP607 | SSTP607S | SSTP607B | SSTP607R | – | SSTP607O | SSTP607Y |
| 10 m | – | SSTP610 | SSTP610S | SSTP610B | SSTP610R | – | SSTP610O | SSTP610Y |
| 15 m | SSTP615W | SSTP615 | SSTP615S | SSTP615B | SSTP615P | SSTP615R | SSTP615O | SSTP615Y |
| 20 m | SSTP620W | SSTP620 | SSTP620S | SSTP620B | SSTP620P | SSTP620R | SSTP620O | SSTP620Y |
| 25 m | SSTP625W | SSTP625 | – | – | – | – | – | – |
| 30 m | SSTP630W | SSTP630 | – | – | – | – | – | – |
| 50 m | SSTP650W | SSTP650 | – | – | – | – | – | – |

## 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.
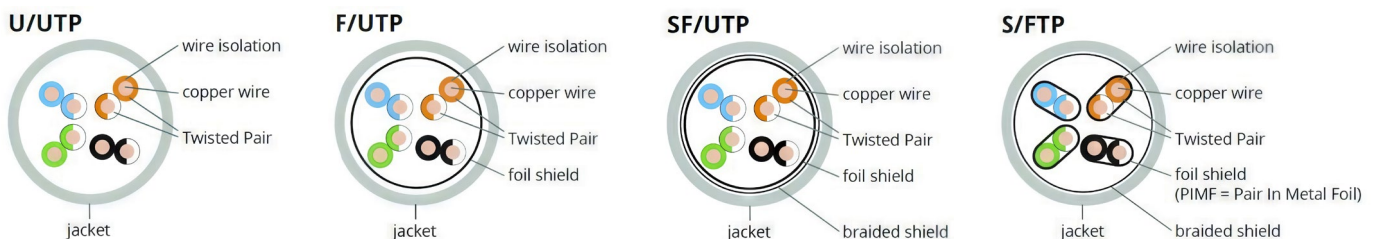
## Shielding

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 |