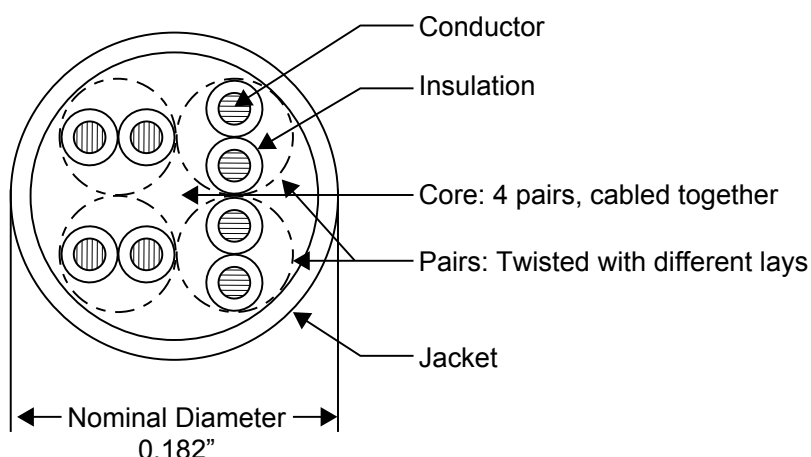


# 510 Series CMP Cat 5e UTP Cable

## TE510P



### Description

TE Connectivity's 510 Series Category 5e (Cat5e) cables meet ANSI/TIA-568-C.2 Enhanced Category 5 (Category 5e) and ISO/IEC 11801 Class D performance requirements. The TE Category 5e System complies with all of the performance requirements for current and proposed applications such as Gigabit Ethernet (1000BASE-Tx), 10 and 100BASE-Tx, token ring, 155 Mbps ATM, 100 Mbps TP-PMD, ISDN, analog and digital video, and analog and digital voice (VoIP).

510 Series Category 5e cables are available in standard colors white, gray, blue and yellow. Packaging includes pull boxes and reels. Additional jacket colors are also available.

### Specification

Horizontal cabling shall be 24 AWG, 4-pair UTP, NEC/NFPA CMP rated and be independently verified for compliance. Cable jacketing shall be white, gray, blue or yellow and shall be lead-free. Cable shall be independently verified by ETL and shall meet all ANSI/TIA and ISO Enhanced Category 5/Class D requirements as well as meet the performance requirements listed in the table on page 2.

Cable performance shall be verified and characterized to 1 00 MHz. Cable shall be supplied on reels or in pull boxes. Cable shall be independently verified for flammability by UL. Flammability shall comply to NEC article 800 and CMP NFPA 262. Horizontal cable shall be TE catalog part number TE510P-XXYY.

### ORDERING INFORMATION

| Product Description                                       | Packaging        | Part Numbers |
|-----------------------------------------------------------|------------------|--------------|
| Category 5e UTP Cable, 200MHz, 4-Pair, Plenum (CMP) Rated | 1000 ft Pull-box | TE510P-XXII  |
|                                                           | 1000 ft Reel     | TE510P-XX02  |

\*Additional reel sizes available, please contact TE customer service.

The following jacket colors are available. Replace XX with:

|          |          |           |           |          |
|----------|----------|-----------|-----------|----------|
| BL= Blue | WT=White | GY=Gray   | YL=Yellow | GN=Green |
| BK=Black | RD=Red   | OR=Orange | VT=Violet | BN=Brown |



# 510 Series CMP Cat 5e Cable Cut Sheet

TE510P

## PERFORMANCE DATA

| Frequency (MHz) | Insertion Loss (Attenuation) dB/100m max | NEXT (dB) min | PSNEXT (dB) min | ACRF (dB) min | PSACRF (dB) min | RL (dB) min |
|-----------------|------------------------------------------|---------------|-----------------|---------------|-----------------|-------------|
| 1               | 2.0                                      | 65.3          | 62.3            | 63.8          | 60.8            | 20.0        |
| 4               | 4.1                                      | 56.3          | 53.3            | 51.8          | 48.8            | 23.0        |
| 8               | 5.8                                      | 51.8          | 48.8            | 45.7          | 42.7            | 24.5        |
| 10              | 6.5                                      | 50.3          | 47.3            | 43.8          | 40.8            | 25.0        |
| 16              | 8.2                                      | 47.2          | 44.2            | 39.7          | 36.7            | 25.0        |
| 20              | 9.3                                      | 45.8          | 42.8            | 37.8          | 34.8            | 25.0        |
| 25              | 10.4                                     | 44.3          | 41.3            | 35.8          | 32.8            | 24.3        |
| 31.25           | 11.7                                     | 42.9          | 39.9            | 33.9          | 30.9            | 23.6        |
| 62.5            | 17.0                                     | 38.4          | 35.4            | 27.9          | 24.9            | 21.5        |
| 100             | 22.0                                     | 35.3          | 32.3            | 23.8          | 20.8            | 20.1        |

## SPECIFICATIONS

|                                         |                                                                                                                                                                                                            |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Mutual Capacitance:</b>              | 5.6 nF/100 m maximum                                                                                                                                                                                       |
| <b>Characteristic Impedance:</b>        | 100 $\Omega$ $\pm$ 15%, 1 - 200 MHz                                                                                                                                                                        |
| <b>Conductor DC Resistance:</b>         | 28.6 $\Omega$ /1000 ft (9.38 $\Omega$ /100 m) maximum                                                                                                                                                      |
| <b>Voltage:</b>                         | 300 VDC                                                                                                                                                                                                    |
| <b>Delay Skew:</b>                      | 45ns/100m maximum                                                                                                                                                                                          |
| <b>Propagation Delay:</b>               | 538ns/100m maximum @ 100MHz                                                                                                                                                                                |
| <b>Nominal Velocity of Propagation:</b> | 76%                                                                                                                                                                                                        |
| <b>Operating Temperature:</b>           | -20°C - 60°C (-4°F - 140°F)                                                                                                                                                                                |
| <b>Storage Temperature:</b>             | -20°C - 80°C (-4°F - 176°F)                                                                                                                                                                                |
| <b>Installation Temperature:</b>        | 5°C - 50°C (41°F - 122°F)                                                                                                                                                                                  |
| <b>Bend Radius:</b>                     | 4 $\times$ cable diameter                                                                                                                                                                                  |
| <b>Packaging:</b>                       | 1000ft ( $\pm$ 2%) Reel: 20 lbs/kft<br>1000ft ( $\pm$ 2%) Pull Box: 20 lbs/kft                                                                                                                             |
| <b>Materials:</b>                       | Conductors: 24 AWG, Solid Copper, ( $\varnothing$ .0201 nominal)<br>Insulation: 0.034 nominal, FEP/polyolefin<br>Jacket: 0.182 nominal, LSPVC                                                              |
| <b>Compliances:</b>                     | UL Subject 444<br>(UL)-C(UL) Type CMP<br>ICEA S-90-661<br>ETL Verified TIA-568-C.2 Category 5e Horizontal Cable Requirements<br>ISO/IEC 11801 Category 5e Horizontal Cable Requirements<br>2002/95/EC RoHS |



## DATA SHEET



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