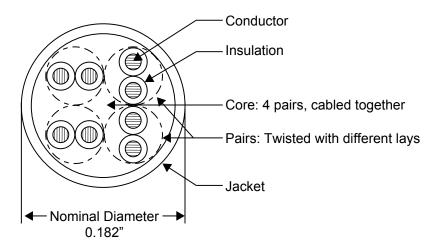
510 Series CMP Cat 5e UTP Cable

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
Catagory, Fa LITD Calala 200MHz. A Dair Dianum (CMD) Dated	1000 ft Pull-box	TE510P-XXII
Category 5e UTP Cable, 200MHz, 4-Pair, Plenum (CMP) Rated	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

Mutual Capacitance: 5.6 nF/100 m maximum Characteristic Impedance: 100 Ω ± 15%, 1 - 200 MHZ

Conductor DC Resistance: 28.6 $\Omega/1000$ ft (9.38 $\Omega/100$ m) maximum

Voltage: 300 VDC

Delay Skew: 45ns/100m maximum

Propagation Delay: 538ns/100m maximum @ 100MHz

Nominal Velocity of Propagation: 76%

Operating Temperature: $-20^{\circ}\text{C} - 60^{\circ}\text{C} (-4^{\circ}\text{F} - 140^{\circ}\text{F})$ Storage Temperature: $-20^{\circ}\text{C} - 80^{\circ}\text{C} (-4^{\circ}\text{F} - 176^{\circ}\text{F})$ Installation Temperature: $5^{\circ}\text{C} - 50^{\circ}\text{C} (41^{\circ}\text{F} - 122^{\circ}\text{F})$ Bend Radius: $4 \times \text{cable diameter}$

Packaging: 1000ft (± 2%) Reel: 20 lbs/kft 1000ft (± 2%) Pull Box: 20 lbs/kft

Materials: Conductors: 24 AWG, Solid Copper, (Ø.0201 nominal)

Insulation: 0.034 nominal, FEP/polyolefin

Jacket: 0.182 nominal, LSPVC

Compliances: UL Subject 444 (UL)-C(UL) Type CMP

ICEA S-90-661

ETL Verified TIA-568-C.2 Category 5e Horizontal Cable Requirements

ISO/IEC 11801 Category 5e Horizontal Cable Requirements

2002/95/EC RoHS





DATA SHEET



Contact us:

Greensboro, NC USA 27409-8420 Tel: 1-800-553-0938 Fax: 1-717-986-7406

www.te.com/EnterpriseNetworks

TE Connectivity, TE connectivity (logo), Tyco Electronics, TE (logo) are trademarks of the TE Connectivity Ltd. family of companies and its licensors.

While TE Connectivity has made every reasonable effort to ensure the accuracy of the information in this document, TE Connectivity does not guarantee that it is error-free, nor does TE Connectivity make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE Connectivity reserves the right to make any adjustments to the information contained herein at any time without notice. TE Connectivity expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this document are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE Connectivity for the latest dimensions and design specifications.