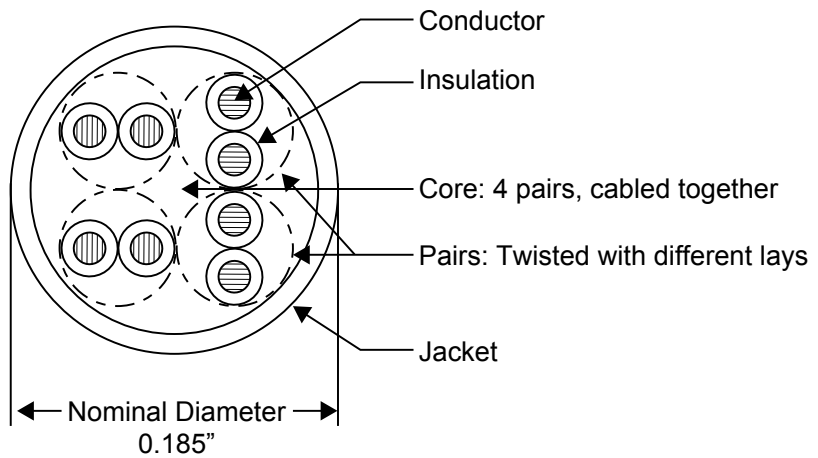


# 510 Series CMR Cat 5e UTP Cable

## TE510R



### 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 CMR 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 independently verified and characterized to 200 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 CMR (ANSI/UL 1666). Horizontal cable shall be TE part number TE510R-XXYY.

### ORDERING INFORMATION

Product Description	Packaging	Part Numbers
Category 5e UTP Cable, 200 MHz, 4-Pair, Riser (CMR) Rated	1000' Pull-box	TE510R-XXII
	1000' Reel	TE510R-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 CMR Cat 5e Cable

TE510R

## PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (Attenuation) dB/100 m 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>	45 ns/100 m maximum
<b>Propagation Delay:</b>	538 ns/100 m maximum @ 100 MHz
<b>Nominal Velocity of Propagation:</b>	69%
<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>	1000' ( $\pm$ 2%) Reel: 20 lbs/kft 1000' ( $\pm$ 2%) Pull Box: 20 lbs/kft
<b>Materials:</b>	Conductors: 24 AWG, Solid Copper, ( $\emptyset$ .0201 nominal) Insulation: 0.035 nominal, Polyethylene Jacket: 0.185 nominal, PVC
<b>Compliances:</b>	UL Subject 444 (UL)-C(UL) Type CMR 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



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