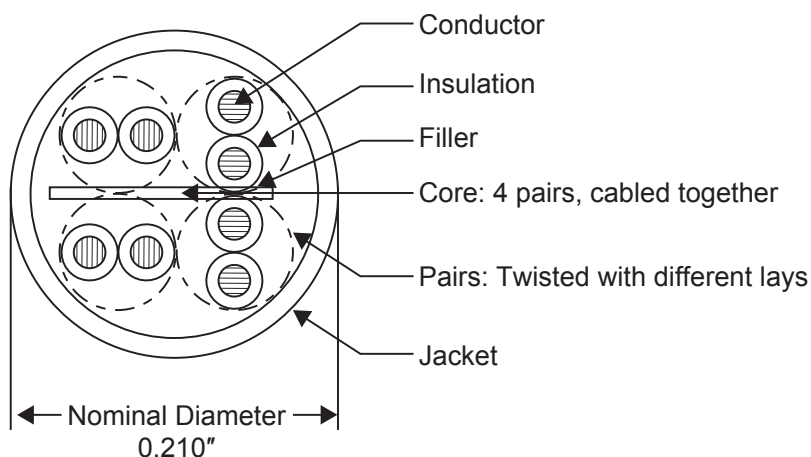


610 Series CMR Cat 6 UTP Cable

TE610R



Description

TE Connectivity's 610 Series Category 6 cables meet ANSI/TIA-568-C.2 Category 6 and ISO/IEC 11801 Class E performance requirements on all parameters. The TE Category 6 System complies with all of the performance requirements for current and proposed applications.

610 Series Category 6 UTP cables are available in standard colors including white, gray, blue and yellow. Category 6 cables from TE feature lead-free jacketing. Packaging is either on reels or in a pull-box, with standard put-ups being 1000ft splice-free lengths.

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 meet all ANSI/TIA and ISO Category 6/Class E requirements as well as meet the performance requirements listed in the table shown on page 2.

Cable shall be supplied on reels or in a pull-box. Independent verification for flammability compliance shall be to NEC article 800 and NFPA 70; CMR ANSI/UL 1666. Horizontal cable shall be TE catalog number TE610R-XXYY.

610 Series CMR Cat 6 UTP Cable Cut Sheet

TE610R

PERFORMANCE DATA

FREQ MHZ	FITTED IMPEDANCE Ohms	INSERTION LOSS dB/100m		RETURN LOSS dB/100m		PAIR-PAIR NEXT dB/100m		PSNEXT dB/100m	
	Spec	Max	Spec	Min	Spec	Min	Spec	Min	Spec
1	100+/-15	1.8	2.0	24.1	20.0	79.5	74.3	76.3	72.3
4	100+/-15	3.5	3.8	26.7	22.9	71.2	65.3	65.2	63.3
8	100+/-15	5.0	5.3	29.2	24.5	67.6	60.8	62.5	58.8
10	100+/-15	5.7	6.0	27.4	25.0	65.6	59.3	61.9	57.3
16	100+/-15	7.2	7.6	26.3	25.0	62.8	56.2	57.8	54.2
20	100+/-15	8.1	8.5	29.1	25.0	61.2	54.8	55.7	52.8
25	100+/-15	9.0	9.5	30.4	24.3	57.8	53.3	53.2	51.3
31.25	100+/-15	10.1	10.7	29.3	23.6	56.2	51.9	51.9	49.9
62.5	100+/-15	14.7	15.4	26.0	21.5	53.6	47.4	47.6	45.4
100	100+/-15	18.6	19.8	22.3	20.1	50.5	44.3	43.9	42.3
155	100+/-15	23.8	25.2	20.8	18.8	47.2	41.4	42.1	39.4
200	100+/-15	27.1	29.0	19.5	18.0	46.3	39.8	40.5	37.8
250	100+/-15	31.2	32.8	18.1	17.3	43.9	38.3	39.6	36.3
300	100+/-15	35.2	-	25.5	-	39.3	-	38.1	-
350	100+/-15	39.2	-	23.4	-	36.1	-	35.6	-
400	100+/-15	43.4	-	20.5	-	31.4	-	30.2	-

PERFORMANCE DATA

FREQ MHZ	PAIR-PAIR ACR dB/100m		PSACR dB/100m		PAIR-PAIR ACRF dB/100m		PSACRF dB/100m		TCL dB/100m	ELTCTL dB/100m
	Min	Spec	Min	Spec	Min	Spec	Min	Spec	Min	Min
1	77.4	72.3	75.2	70.3	71.5	67.8	69.8	64.8	40.0	35.0
4	68.5	61.5	65.3	59.5	59.8	55.8	58.9	52.8	40.0	23.0
8	63.1	55.4	58.9	53.4	57.5	49.7	52.5	46.7	40.0	16.9
10	60.5	53.3	52.1	51.3	52.5	47.8	51.6	44.8	40.0	15.0
16	55.2	48.7	49.2	46.7	47.6	43.7	46.8	40.7	38.0	10.9
20	52.6	46.3	46.5	44.3	46.3	41.8	44.2	38.8	37.0	9.0
25	48.3	43.8	44.9	41.8	44.5	39.8	42.5	36.8	36.0	7.0
31.25	45.7	41.2	43.1	39.2	41.8	37.9	40.8	34.9	35.1	5.1
62.5	36.8	32.0	35.6	30.0	37.6	31.9	31.9	28.9	32.0	-
100	31.4	24.5	28.7	22.5	32.5	27.8	27.1	24.8	30.0	-
155	22.6	16.3	21.3	14.3	29.7	24.0	26.8	21.0	28.1	-
200	18.8	10.8	16.8	8.8	27.4	21.8	25.2	18.8	27.0	-
250	14.7	5.5	9.7	3.5	23.8	19.8	22.4	16.8	26.0	-
300	10.1	-	7.5	-	20.1	-	24.9	-	-	-
350	5.4	-	1.8	-	16.6	-	23.6	-	-	-
400	1.2	-	0	-	12.5	-	21.8	-	-	-

NOTE: The above listed discrete frequency electrical performance values are provided for engineering information only. Actual compliance testing is based on swept frequency measurements.

610 Series CMR Cat 6 UTP Cable Cut Sheet

TE610R

SPECIFICATIONS

Mutual Capacitance:	5.6 nF/100 m nominal
Fitted Impedance:	100 Ω \pm 15%, 1 - 400 MHz
Conductor DC Resistance:	28.6 Ω /1000 ft (9.38 Ω /100 m) maximum
Voltage:	300 VDC
Delay Skew:	45 ns
Propagation Delay:	536 ns/100 m @ 250 MHz
Nominal Velocity of Propagation:	69%
Operating Temperature:	-20°C - 60°C (-4°F - 140°F)
Storage Temperature:	-20°C - 80°C (-4°F - 176°F)
Installation Temperature:	5°C - 50°C (41°F - 122°F)
Bend Radius:	4 \times cable diameter
Packaging:	1000ft Pull-box: 24 lbs/kft 1000ft Reel: 24 lbs/kft
Materials:	Conductors: 24 AWG, Solid Copper Insulation: \varnothing .037 nominal, polyethylene Jacket: \varnothing .210 nominal, FR PVC
Compliances:	UL Subject 444 (UL)-C(UL) Type CMR ICEA S-90-661 ETL Verified TIA-568-C.2 Category 6 Horizontal Cable Requirements ISO/IEC 11801 Category 6 Horizontal Cable Requirements 2002/95/EC RoHS



ORDERING INFORMATION

Product Description	Packaging	Part Numbers
610 Series Cat 6 UTP Cable, 4-Pair, Riser (CMR) Rated	1000 ft Pull-Box	TE610R-XXII
	1000 ft Reel	TE610R-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

DATA SHEET



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312684AE 12/12 Revision © 2012