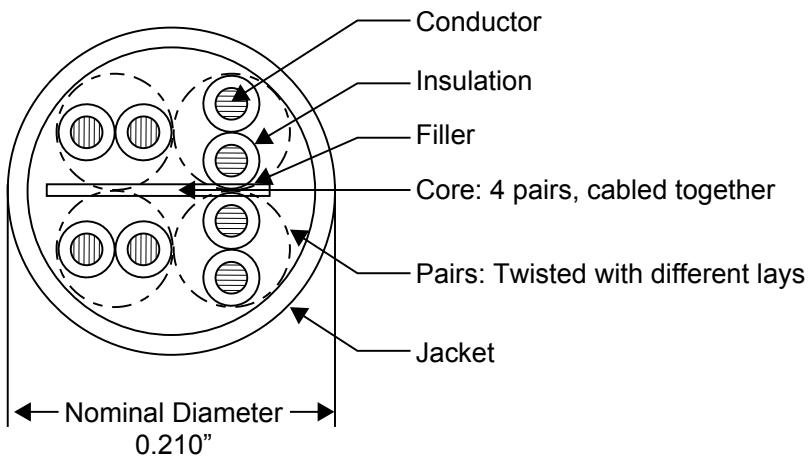


620 Series CMR Cat 6 UTP Cable

TE620R



Description

TE Connectivity's 620 Series cables exceed ANSI/TIA-568-C Category 6 and ISO/IEC 11801 ClassE performance requirements by significant margins on all parameters. The TE Category 6 System complies with all of the performance requirements for current and proposed applications such as Gigabit Ethernet (1000BASE-Tx), 10/100BASE-Tx, token ring, 155 Mbps ATM, 100 Mbps TP-PMD, ISDN, analog and digital video and analog and digital voice (VoIP).

620 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 on reels, reel-in-a-box, or a pull-box, with standard put-ups being 1000 ft 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 exceed 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 performance shall be independently verified and characterized to 600 MHz. Cable shall be supplied on reels, reel-in-a-box, or 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 TE620R-XXYY.

620 Series CMR Cat 6 UTP Cable

TE620R

PERFORMANCE DATA

FREQ MHZ	FITTED IMPEDANCE Ohms	INSERTION LOSS dB/100 m		RETURN LOSS dB/100 m		PAIR-PAIR NEXT dB/100 m		PSNEXT dB/100 m	
	Spec	Max	Spec	Min	Spec	Min	Spec	Min	Spec
1	100+/-5	1.7	2.0	28.5	20.0	83.8	74.3	81.9	72.3
4	100+/-3	3.4	3.8	32.1	22.9	74.9	65.3	74.3	63.3
8	100+/-3	4.9	5.3	35.0	24.5	74.4	60.8	71.0	58.8
10	100+/-3	5.5	6.0	34.6	25.0	70.3	59.3	68.0	57.3
16	100+/-3	7.0	7.6	31.7	25.0	67.2	56.2	66.7	54.2
20	100+/-3	7.9	8.5	32.1	25.0	66.8	54.8	64.7	52.8
25	100+/-3	8.9	9.5	36.5	24.3	65.6	53.3	63.6	51.3
31.25	100+/-3	9.9	10.7	36.7	23.6	61.8	51.9	60.9	49.9
62.5	100+/-3	14.3	15.4	34.0	21.5	61.0	47.4	59.3	45.4
100	100+/-3	18.4	19.8	30.8	20.1	60.2	44.3	57.4	42.3
155	100+/-3	23.3	25.2	27.3	18.8	54.8	41.4	51.4	39.4
200	100+/-3	26.8	29.0	31.0	18.0	54.9	39.8	52.4	37.8
250	100+/-3	30.4	32.8	28.6	17.3	49.5	38.3	48.5	36.3
300	100+/-3	33.7	-	27.2	-	49.0	-	48.2	-
350	100+/-3	36.7	-	24.3	-	46.3	-	44.8	-
400	100+/-3	39.6	-	25.0	-	47.5	-	45.2	-
550	100+/-3	47.7	-	18.6	-	40.2	-	39.4	-
600	100+/-3	47.5	-	15.2	-	38.3	-	35.4	-

PERFORMANCE DATA

FREQ MHZ	PAIR-PAIR ACR dB/100 m		PSACR dB/100 m		PAIR-PAIR ACRF dB/100 m		PSACRF dB/100 m		TCL dB/100 m	ELTCTL dB/100 m
	Min	Spec	Min	Spec	Min	Spec	Min	Spec	Min	Min
1	82.2	72.3	80.3	70.3	73.6	67.8	72.6	64.8	40.0	35.0
4	71.7	61.5	71.2	59.5	62.7	55.8	61.8	52.8	40.0	23.0
8	69.8	55.4	66.4	53.4	57.2	49.7	56.2	46.7	40.0	16.9
10	65.1	53.3	62.8	51.3	55.2	47.8	54.2	44.8	40.0	15.0
16	60.5	48.7	60.0	46.7	51.1	43.7	49.8	40.7	38.0	10.9
20	59.4	46.3	57.4	44.3	49.3	41.8	48.2	38.8	37.0	9.0
25	57.3	43.8	55.3	41.8	47.4	39.8	46.5	36.8	36.0	7.0
31.25	52.5	41.2	51.3	39.2	45.5	37.9	44.4	34.9	35.1	5.1
62.5	47.3	32.0	45.7	30.0	40.1	31.9	39.4	28.9	32.0	-
100	42.7	24.5	39.8	22.5	36.8	27.8	35.9	24.8	30.0	-
155	32.4	16.3	28.9	14.3	33.6	24.0	33.2	21.0	28.1	-
200	29.6	10.8	26.9	8.8	31.7	21.8	30.6	18.8	27.0	-
250	20.3	5.5	19.3	3.5	29.1	19.8	28.9	16.8	26.0	-
300	16.6	-	15.8	-	26.2	-	25.5	-	-	-
350	10.9	-	9.4	-	21.3	-	21.8	-	-	-
400	10.1	-	7.9	-	22.1	-	22.5	-	-	-
550	-	-	-	-	25.7	-	24.7	-	-	-
600	-	-	-	-	11.5	-	9.6	-	-	-

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

620 Series CMR Cat 6 UTP Cable

TE620R

SPECIFICATIONS

Mutual Capacitance:	5.6 nF/100 m maximum
Conductor DC Resistance:	28.6 Ω /1000 ft (9.38 Ω /100 m) maximum
Voltage:	300 VDC
Delay Skew:	25 ns/100 m
Propagation Delay:	485 ns/100 m @ 250 MHz
Nominal Velocity of Propagation:	69%
Operating Temperature:	-20° C - 75° C (-4° F - 167° F)
Storage Temperature:	-20° C - 80° C (-4° F - 176° F)
Installation Temperature:	5° C - 50° C (41° F - 122° F)
Bend Radius:	4 x cable diameter
Packaging: 1000' Reel-in-a-box:	31 lbs/kft
1000' Reel:	28 lbs/kft
1000' Pull-box:	28 lbs/kft
Materials: Conductors:	24 AWG, Solid Copper
Insulation:	Ø.038 nominal, polyethylene
Jacket:	Ø.210 nominal, FR PVC
Compliances:	UL Subject 444 (UL)-CUL 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 IEEE 802.3at PoE+



ORDERING INFORMATION

Product Description	Packaging	Part Number
Category 6 UTP Cable, 4-Pair, Riser (CMR) Rated	1000' Reel-in-Box	TE620R-XXRB
	1000' Pull-box	TE620R-XXII
	1000' Reel	TE620R-XX02
	1000' Side-by-side	TE620RX2-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



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.