



620 Series CMP Cat 6 UTP Cable Cut Sheet

TE620P

Description

CommScope's 620 Series Category 6 plenum cables feature the best in class AirES® technology. This patented design saves as much as 32% of the available space in cable runs and is a key component of the CommScope structured cabling system. The smaller diameter also saves space in the communications closet, reduces the amount of cable management accessories required and lowers the risk associated with fire and smoke in the plenum space.

620 Series Category 6 cables exceed ANSI/TIA-568-C Category 6 and ISO/IEC 11801 ClassE performance requirements by significant margins on all parameters. The CommScope 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 CommScope 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 23 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. Individual conductors shall be 100% virgin FEP insulated. 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 reels, reel-in-a-box, or a pull-box. Independent verification for flammability compliance shall be to NEC article 800 and NFPA 70; NFPA 262.

Horizontal cable shall be CommScope part number TE620P-XXXX.

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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.

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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 × 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 (0.0224" nominal)
	Insulation:	0.039 nominal, FEP
	Jacket:	0.215 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
		IEEE 802.3at PoE+



Ordering Information

Product Description	Packaging	Part Number
Category 6 UTP Cable, 4-Pair, Riser (CMR) Rated	1000' Reel-in-Box	TE620P-XXRB
	1000' Pull-box	TE620P-XXII
	1000' Reel	TE620P-XX02
	1000' Side-by-side	TE620PX2-XX02

*Additional reel sizes available, please contact CommScope 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



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