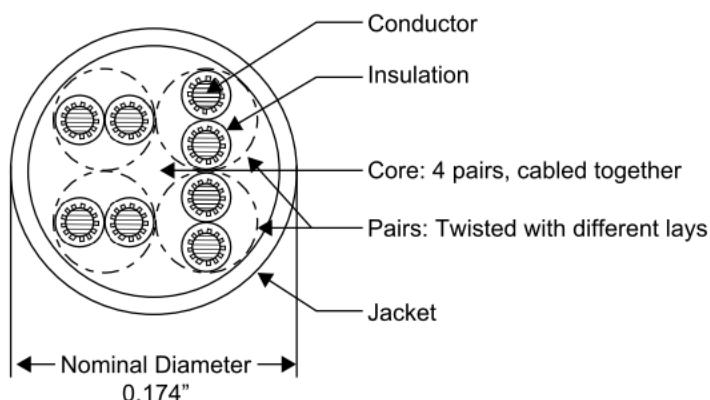


520 Series CMP Cat 5e UTP Cable

TE520P



Description

TE Connectivity's 520 Series Enhanced Category 5e 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 TE 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.

TE Connectivity Enhanced Category 5e (Cat5E) cables exceed ANSI/TIA-568-C.2 Enhanced Category 5 (Category 5e) and ISO/IEC 11801 Class D performance requirements by significant margins, providing extra headroom for a more robust cabling system. The TE Enhanced Category 5 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).

520 Series Category 5E cables are available in standard colors white, gray, blue and yellow. Packaging includes reel-in-a-box, 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. Individual conductors shall be 100% FEP insulated. Cable shall be independently verified by ETL and shall exceed all ANSI/TIA and ISO Enhanced Category 5/Class D 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 350MHz. Cable shall be supplied on reels, in pull boxes or in a reel-in-a-box. Cable shall be independently verified for flammability by UL. Flammability shall comply to NEC article 800 and NFPA 262. Horizontal cable shall be TE Catalog part number TE520P-XXYY.

520 Series CMP Cat 5e UTP Cable Cut Sheet

TE520P

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+/-5	1.9	2.0	33.1	20.0	79.8	65.3	78.1	62.3
4	100+/-3	3.7	4.1	30.1	22.9	72.4	56.3	67.9	53.3
8	100+/-3	5.3	5.8	32.7	24.5	64.4	51.8	63.5	48.8
10	100+/-3	6.0	6.5	31.4	25.0	63.7	50.3	62.4	47.3
16	100+/-3	7.6	8.2	37.0	25.0	61.4	47.2	59.7	44.2
20	100+/-3	8.6	9.3	37.5	25.0	59.7	45.8	58.0	42.8
25	100+/-3	9.6	10.4	35.1	24.3	58.7	44.3	56.9	41.3
31.25	100+/-3	10.8	11.7	34.4	23.6	58.7	42.9	54.9	39.9
62.5	100+/-3	15.5	17.0	33.2	21.5	52.4	38.4	50.3	35.4
100	100+/-3	19.8	22.0	29.8	20.1	49.3	35.3	47.2	32.3
155	100+/-3	25.1	-	29.3	-	51.3	-	47.9	-
200	100+/-3	28.9	-	22.9	-	47.5	-	45.5	-
250	100+/-3	32.5	-	25.0	-	42.6	-	41.1	-
300	100+/-3	35.9	-	22.5	-	43.6	-	41.1	-
350	100+/-3	39.3	-	22.4	-	41.1	-	39.6	-

PERFORMANCE DATA

FREQ MHZ	PAIR-PAIR ACR dB/100m		PSACR dB/100m		PAIR-PAIR ACRF dB/100m		PSACRF dB/100m	
	Min	Spec	Min	Spec	Min	Spec	Min	Spec
1	78.0	63.3	76.4	60.3	70.2	63.8	70.0	60.8
4	68.7	52.0	64.3	49.2	58.9	51.8	58.7	48.8
8	59.1	46.0	58.2	43.0	52.8	45.7	52.5	42.7
10	57.9	43.8	56.4	40.8	51.1	43.8	50.8	40.8
16	54.0	39.0	52.2	36.0	47.4	39.7	47.1	36.7
20	51.2	36.5	49.5	33.5	45.0	37.8	44.9	34.8
25	49.2	33.9	47.5	30.9	43.0	35.8	42.6	32.8
31.25	48.2	31.2	44.3	28.2	41.4	33.9	41.1	30.9
62.5	37.0	32.4	34.9	18.4	35.2	27.9	35.2	24.9
100	29.9	13.3	27.9	10.3	32.0	23.8	31.7	20.8
155	26.7	-	23.6	-	28.7	-	28.6	-
200	19.6	-	16.9	-	27.4	-	27.3	-
250	10.9	-	9.4	-	25.8	-	25.4	-
300	8.6	-	6.1	-	24.4	-	23.8	-
350	2.5	-	0.8	-	22.8	-	22.1	-

520 Series CMP Cat 5e UTP Cable Cut Sheet

TE520P

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:	25ns/100m maximum
Propagation Delay:	538ns/100m maximum @ 100MHz
Nominal Velocity of Propagation:	76%
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 × cable diameter
Packaging:	1000ft (± 2%) Reel: 20 lbs/mft 1000ft (± 2%) Reel-in-a-Box: 23 lbs/mft 1000ft (± 2%) Pull Box: 20 lbs/mft
Materials:	Conductors: 24 AWG, Solid Copper, (Ø.0201 nominal) Insulation: 0.034 nominal, FEP (fluoropolymer) Jacket: 0.175 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



ORDERING INFORMATION

Product Description	Packaging	Part Numbers
Category 5E UTP Cable, 350MHZ, 4-Pair, Plenum (CMP) Rated	1000 ft Reel-in-box	TE520P-XXRB
	1000 ft Pull-box	TE520P-XXII
	1000 ft Reel	TE520P-XXO2
	1000 ft Side-by-side	TE520PX2-XXO2

*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=Brow

DATA SHEET



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