



## Description

AMP NETCONNECT Enhanced Category 5 (Cat5e) cables meet or exceed TIA/EIA-568-B.2 Enhanced Category 5 (Category 5e) and ISO/IEC 11801 Class D performance requirements. The AMP NETCONNECT 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).

AMP NETCONNECT Category 5e FTP plenum rated cables are available in standard colors gray, blue and violet. AMP NETCONNECT Category 5e FTP riser rated cables are available in standard colors white, gray and blue. Packaging is on wooden reels.

## **Specification** (text in brackets [] requires a choice)

Horizontal cabling shall be 24 AWG, 4-pair FTP, NEC/NFPA [CMP or CMR] rated and be independently verified for compliance. Cable jacketing shall be [white, gray or blue (if riser) or gray, blue or yellow (if plenum)]. [Individual conductors shall be 100% FEP insulated (if plenum)]. Cable shall be independently verified by ETL and shall exceed all TIA/EIA and ISO Enhanced Category 5/Class D requirements as well as meet the performance requirements listed in the following table: [include Performance Characteristics tables from page 2].

Cable performance shall be independently verified and characterized to 100MHz. Cable shall be supplied on wooden reels. Cable shall be independently verified for flammability by UL (file number E107890) and shall comply to NEC article 800 and NFPA 70; [CMP (NFPA 262, UL 910) or CMR (ANSI/UL 1666, IEC 332-1)]. Horizontal cable shall be AMP NETCONNECT part number [1499171-X or 14799172-X].

### **Part Numbers**

Description	Packaging -	Part Numbers				
	r ackaging	White	Gray	Blue	Violet	
Category 5e FTP Cable, 4-Pair, Riser (CMR) Rated	WR	_	1499171-3	1499171-5	1499171-7	
Category 5e FTP Cable, 4-Pair, Plenum (CMP) Rated	WR	1499172-1	1499172-3	1499172-5	-	

Packaging: WR = 1000ft Wooden Reel

# Category 5e FTP Cable 1499171-X, 1499172-X

Frequency (MHz)	Insertion Loss (dB/100m)	NEXT (dB)	PSNEXT (dB)	ELFEXT (dB)	PSELFEXT (dB)	RL (dB)	SRL (dB)	ACR (dB)	PSACR (dB)
0.772	1.8	67.0	64.0	-	-	-	-	65.2	62.2
1	2.0	65.3	62.3	63.8	60.8	20.0	25.0	63.3	60.3
4	4.1	56.3	53.3	51.8	48.8	23.0	25.0	52.2	49.2
8	5.8	51.8	48.8	45.7	42.7	24.5	25.0	46.0	43.0
10	6.5	50.3	47.3	43.8	40.8	25.0	25.0	43.8	40.8
16	8.2	47.2	44.2	39.7	36.7	25.0	25.0	39.0	36.0
20	9.3	45.8	42.8	37.8	34.8	25.0	25.0	36.5	33.5
25	10.4	44.3	41.3	35.8	32.8	24.3	24.3	33.9	30.9
31.25	11.7	42.9	39.9	33.9	30.9	23.6	23.6	31.2	28.2
62.5	17.0	38.4	35.4	29.7	24.9	21.5	21.5	21.4	18.4
100	22.0	35.3	32.3	23.8	20.8	20.1	20.1	13.3	10.3

# **Technical Details**

		CMR	СМР			
Mutual Capacitance		5.6nF/100m nominal	5.6nF/100m nominal			
Characteristic Impedance		100Ω ±15%, 1 - 100MHZ	100Ω ±15%, 1 - 100MHZ			
Conductor DC Resistance		9.38Ω/100m maximum	9.38Ω/100m maximum			
Voltage		300VAC or VDC	300VAC or VDC			
Delay Skew		45ns/1000ft maximum	45ns/1000ft maximum			
Propagation	Delay	538ns/100m maximum @ 100MHz	538ns/100m maximum @ 100MHz			
Nominal Velo	ocity of Propagation	72%	72%			
<b>Operating Te</b>		-20° C – 72° C (-4° F – 161° F)	-20° C – 60° C (-4° F – 140° F)			
Storage Tem	perature	-20° C – 80° C (-4° F – 176° F)	-20° C – 80° C (-4° F – 176° F)			
Bend Radius		$(4 \times \text{cable diameter}) \approx 1$ "	$(4 \times \text{cable diameter}) \approx 1$ "			
Packaging		1000ft (± 2%) Wooden Reel, 31lbs/mft	1000ft (± 2%) Wooden Reel, 29lbs/mft			
Materials	Conductors –	24 AWG, Solid Copper, (Ø.021 nominal)	24 AWG, Solid Copper, (Ø.021 nominal)			
	Insulation –	0.010in (Ø.042 nominal), Polyethylene	0.010in (Ø.041 nominal), FEP (fluoropolymer)			
	Jacket –	0.025in nominal (Ø.240 nominal), FR-PVC	0.018in nominal (Ø.219 nominal), FEP (fluoropolymer)			
	Shield –	0.002in thick nominal, Aluminum/Polyester	0.002in thick nominal, Aluminum/Polyester			
	Drain Wire –	24 AWG, Stranded (7/32), Tinned Copper	24 AWG, Stranded (7/32), Tinned Copper			
	Binder –	Polyester Tape, 0.001in Thick	Polyester Tape, 0.001in Thick			
Safety –		UL LISTED (file number E107890) for safety to: CMR – (UL 1666, IEC 332-1) CMP – (NFPA 262, UL 910)				
	Performance –	ETL Verified to: TIA/EIA-568-B.2	<b>E</b> RIFIE <sup>SS</sup>			

## Specifications subject to change without notice.

In the U.S.A 1-800-553-0938 Canada 905-475-6222 525-729-0400 Mexico **South and Central Americas** 54-11-4733-2200 web: http://www.ampnetconnect.com/ e-mail: networking.help@tycoelectronis.com

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