

Category 6A U/UTP AMP-TWIST Modular Jacks



The new AMP NETCONNECT Category 6A U/UTP AMP-TWIST modular jacks from TE Connectivity deliver the next generation of 10G performance and continue the evolution of high density solutions for the data center and LAN environments while meeting all of the requirements for Category 6A ANSI/TIA and ISO standards.

The new Category 6A U/UTP AMP-TWIST modular jacks from TE utilize superior technology to reduce alien crosstalk noise to enhance overall performance. The AMP-TWIST termination technology provides for fast and reliable terminations utilizing an integrated lacing fixture for use with the AMP NETCONNECT SL Series modular jack termination tool. The modular jacks contain integrated cutting blades to allow all four pairs of a four pair cable to be terminated at one time—quickly and reliably. Universal wiring labels permit termination to either T568A or T568B wiring patterns.



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SPECIFICATION (text in brackets [] requires a choice)

Modular jacks shall be unkeyed, 4-pair, RJ-45, and shall fit in a .790" X .582" opening. Modular jacks shall terminate using the AMP NETCONNECT SL Series modular jack termination tool part number 1725150. Jacks shall employ a lacing fixture for easy wire lacing and include integrated strain relief features. Jacks shall include integrated cutting blades for automatically trimming conductors consistently. Each modular jack shall be wired to **[T568A or T568B]** and shall accommodate cable with a maximum O.D. of 9.00 mm. The insulation displacement contacts shall be capable of terminating 24-22 AWG solid or 24 AWG stranded conductors with a maximum insulation diameter of 1.60 mm. The insulation displacement contacts shall be paired, with additional space between pairs to improve crosstalk performance. Each modular jack shall meet the ANSI/TIA-568-C.2 and ISO 11801, Category 6A performance standards and the requirements listed in the following table.

CHANNEL PERFORMANCE CHARACTERISTICS (meet or exceed ANSI/EIA/TIA, ISO/IEC and IEEE requirements)

Frequency (MHz)	Insertion Loss (dB)	NEXT (dB)	PSNEXT (dB)	ACRF (dB)	PSACRF (dB)	Return Loss (dB)	Prop Delay (ns/100m)	Prop Delay Skew (ns)	TCL (dB)	ELTCL/ TCTL (dB)	PSANEXT (dB)	PSACRF/ PSAFEXT (dB)
0.772	2.1	65.0	62.0	65.5	62.5	19.0	585.0	50.0	40.0	32.2	67.0	67.0
1	2.3	65.0	62.0	63.3	60.3	19.0	580.0	50.0	40.0	30.0	67.0	67.0
4	4.2	63.0	60.5	51.2	48.2	19.0	562.0	50.0	40.0	18.0	67.0	65.0
8	5.8	58.2	55.6	45.2	42.2	19.0	556.7	50.0	39.5	11.9	67.0	58.9
10	6.5	56.6	54.0	43.3	40.3	19.0	555.4	50.0	38.0	10.0	67.0	57.0
16	8.2	53.2	50.6	39.2	36.2	18.0	553.0	50.0	34.9	5.9	67.0	52.9
20	9.2	51.6	49.0	37.2	34.2	17.5	552.0	50.0	33.5	4.0	67.0	51.0
25	10.2	50.0	47.3	35.3	32.3	17.0	551.2	50.0	32.0	2.0	66.0	49.0
31.25	11.5	48.4	45.7	33.4	30.4	16.5	550.4	50.0	30.4	N/A	65.1	47.1
62.5	16.4	43.4	40.6	27.3	24.3	14.0	548.6	50.0	24.4	N/A	62.0	41.1
100	20.9	39.9	37.1	23.3	20.3	12.0	547.6	50.0	20.3	N/A	60.0	37.0
200	30.1	34.8	31.9	17.2	14.2	9.0	546.5	50.0	14.3	N/A	55.5	31.0
250	33.9	33.1	30.2	15.3	12.3	8.0	546.3	50.0	12.3	N/A	54.0	29.0
300	37.4	31.7	28.8	13.7	10.7	7.2	546.1	50.0	10.8	N/A	52.8	27.5
400	43.6	28.7	25.8	11.2	8.2	6.0	545.8	50	8.3	N/A	51.0	24.9
500	49.3	26.1	23.2	9.28	6.3	6.0	545.6	50	6.3	N/A	49.5	23.0

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TECHNICAL DETAILS

MATERIALS

Modular Jack Housing:	Polycarbonate, stainless steel fiber filled
Lacing Fixture:	Polycarbonate
Interface Contacts:	Beryllium copper, plated with 1.27 µm [50 µin] minimum thick gold in localized area and 3.81 µm [150 µin] minimum thick matte tin in solder area over 1.27 µm minimum thick nickel underplate
Insulation Displacement Contacts:	Phosphorous bronze, plated with 3.81 µm [150 µin] minimum thick matte tin over 1.27 µm [50 µin] minimum thick nickel underplate
Cutting Blades:	Stainless steel
Integral Dust Cover:	Polycarbonate

ELECTRICAL

Voltage:	150 VAC Max
Operating Temperature:	-40° to 70° C (-40° to 158° F)

MECHANICAL

Modular Jack:	750 mating cycles
Insulation Displacement Contacts:	Accept solid, 24-22 AWG conductors or stranded 24 AWG conductors with a maximum insulation diameter of 1.60 mm Accepts cables with a maximum O.D. of 9.00 mm
Cable Outside Diameter:	
UL Listed to U.S. and Canadian safety standards, reference UL File Number:	E81956

ORDERING INFORMATION

Description	EIA/TIA Category (ISO Class)	Form Factor	Integrated Dust Cover	Part Number
Cat 6A U/UTP AMP TWIST Jack	Cat 6A (Class E ₂)	SL Series	No	1933476-X
			Yes	2111676-X

X denotes jack color: -1 = Almond -2 = Black -4 = Gray -5 = Orange
 -6 = Blue -7 = Red -8 = Yellow -9 = Green
 1--0 = Violet 1--1 = Electrical Ivory 1--3 = Alpine White

DATA SHEET



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