

# GMMD DIFFERENTIAL TWINAX Modular High-Speed Micro-D Connectors



Twinax and Combo Twinax contact arrangements,  
material / finish details, panel cutouts

GMMD TWINAX AND COMBO TWINAX CONNECTORS

GMMD TWINAX AND COMBO TWINAX CONTACT ARRANGEMENTS (additional arrangements are available, consult factory)					
<b>Contact Arrangement</b>	<b>2T</b>	<b>4T</b>	<b>2T9</b>	<b>2T15</b>	<b>4T9</b>
<b>Shell Size</b>	9	15	21	25	31
<b>No. / type of contacts</b>	2 Twinax	4 Twinax	2 Twinax, 9 #24	2 Twinax, 15 #24	4 Twinax, 9#24
<b>Example applications</b>	SpFi	10GbE, 2xSATA, SpW, 2xSpFi	USB 3.1, SATA + power		HDMI, DP, DVI, 10GbE + power
<b>Contact Arrangement</b>	<b>5T9</b>	<b>8T</b>	<b>4T15</b>	<b>8T15</b>	<b>4T31</b>
<b>Shell Size</b>	31	31	37	51-2	51-2
<b>No. / type of contacts</b>	5 Twinax, 9 #24	8 Twinax	4 Twinax, 15 #24	8 Twinax, 15 #24	4 Twinax, 31 #24
<b>Example applications</b>	DP incl. Aux channels	2x10GbE		DP or HDMI + USB 3.1, dual DVI	
<b>Contact Arrangement</b>	<b>12T15</b>	<b>6T37</b>	<b>8T31</b>	<b>16T</b>	
<b>Shell Size</b>	67	67	67	67	
<b>No. / type of contacts</b>	12 Twinax, 15 #24	6 Twinax, 37 #24	8 Twinax, 31 #24	16 Twinax	
<b>Example applications</b>				4x10GbE	

GMMD MODULAR HIGH-SPEED MICRO-D STANDARD MATERIALS AND FINISHES	
<b>Connector Shell, Metal</b>	Aluminum Alloy 6061 IAW SAE AMS-QQ-A-250/11: Plating code 2: electroless nickel IAW ASTM B733 / Plating code 5: gold plated IAW ASTM B488 over electroless nickel IAW ASTM B733-90. / Plating code 6: chem film IAW MIL-C-5541 Class 3 Stainless Steel, 300 Series: Plating Code 3: Passivated IAW SAE AMS 2700
<b>#24 Insulator and organizer tray</b>	High-grade, high-temperature thermoplastic
<b>Interfacial Seal (where applicable)</b>	Fluorosilicone rubber IAW MIL-R-25988
<b>Conductive Potting</b>	Silver-loaded epoxy
<b>EMI Spring</b>	Gold-plated stainless steel
<b>#24 Pin Contact (TwistPin)</b>	Beryllium copper, gold plated IAW ASTM B 488 Type II Class 1.27 (50 Min minimum) Code C, over nickel underplate IAW SAE AMS-QQ-N-290, class 2, (50-150 µin).
<b>#24 Socket Contact</b>	Phos bronze IAW ASTM 139 gold plated IAW ASTM B 488 Type II Class 1.27 (50 Min minimum) Code C, over nickel underplate IAW SAE-AMS-QQ-N-290, Class 2, (50-150 µin).
<b>Twinax #30 pin contacts</b>	Spring Temper Gold alloy, unplated, per ASTM B477 and ASTM B541
<b>Twinax #30 socket contacts</b>	Gold alloy, unplated, per ASTM B477 and ASTM B541
<b>Twinax Insert</b>	High-grade thermoplastic
<b>Encapsulant</b>	High-temperature potting
<b>Jackscrews, Jackposts, Float Mounts</b>	Stainless steel, 300 series, passivated IAW SAE AMS 2700
<b>Twinax wire</b>	AWG 28 or 30 twisted pair, PTFE dielectric, silver plated copper conductors, SPC braid, fluoropolymer jacket

RECOMMENDED PANEL CUTOUT								
Layout Diagram		Layout	A	B	C	D	E	F
Front Panel Mount	Rear Panel Mount		mm. ± 0.08	mm. ± 0.05	mm. ± 0.05	mm. ± 0.05	mm. + 0.13, - 0.00	mm. ± 0.05
		9	14.35	10.41	2.31	7.04	6.50	3.20
		15	18.16	14.22	2.31	7.04	6.50	3.20
		21	21.97	18.03	2.31	7.04	6.50	3.20
		25	24.51	20.57	2.31	7.04	6.50	3.20
		31	28.32	24.38	2.31	7.04	6.50	3.20
		37	32.13	28.19	2.31	7.04	6.50	3.20
		51-2	41.02	37.08	2.31	7.04	6.50	3.20
		67	51.18	47.19	2.31	7.04	6.50	3.20