

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



Selection Guide • Coax and combo coax contact arrangements materials and finishes • panel cutouts

The Series GMMD is an innovative modular Micro-D connector for RF coax and high-speed differential datalink applications. The unique micro miniature design of the GMMD also accommodates standard analog signal and power contacts, making it the most versatile Micro-D rectangular in the industry. GMMD leverages RF Coax contacts with Glenair Signature Micro-D and Nano TwistPin contact inserts. GMMD is supplied as factory-terminated pigtailed, point-to-point connectors, and SMT receptacles for easy PCB mounting.

## Connector Selection Guide



**GMMD-HRE / -HRPE**  
Horizontal PCB-mount Coax receptacles  
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**GMMD-FP / -FPE / -FR / -FRP / -FPCC**  
Coax and Combo Coax jumpers and pigtailed  
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| GMMD COAX AND COMBO COAX CONTACT ARRANGEMENTS (additional arrangements are available, consult factory) |                         |                          |                          |              |
|--|-------------------------|--------------------------|--------------------------|--------------|
|  |                         |                          |                          |              |
| <b>Contact Arrangement</b>   | <b>2C</b>               | <b>4C</b>                | <b>6C</b>                |              |
| <b>Shell Size</b>  | 9                       | 21                       | 25                       |              |
| <b>No. / type of contacts</b>  | 2 X 50Ω Coax            | 4X 50Ω Coax              | 6X 50Ω Coax              |              |
|  |                         |                          |                          |              |
| <b>Contact Arrangement</b>   | <b>8C</b>               |                          | <b>16C</b>               |              |
| <b>Shell Size</b>  | 37                      |                          | 67                       |              |
| <b>No. / type of contacts</b>  | 8 X 50Ω Coax            |                          | 16X 50Ω Coax             |              |
|  |                         |                          |                          |              |
| <b>Contact Arrangement</b>   | <b>2C9</b>              | <b>1V9</b>               | <b>2V9</b>               | <b>4V</b>    |
| <b>Shell Size</b>  | 21                      | 21                       | 31                       | 21           |
| <b>No. / type of contacts</b>  | 2X 50Ω Coax,<br>9 X #24 | 1 X 75Ω Coax,<br>9 X #24 | 2 X 75Ω Coax,<br>9 X #24 | 4 X 75Ω Coax |

| 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<br>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>#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>Coax isolating bush</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   |

| RECOMMENDED PANEL CUTOUT |                  |        |               |               |               |               |                       |               |
|--------------------------|------------------|--------|---------------|---------------|---------------|---------------|-----------------------|---------------|
| Layout Diagram           |                  | Layout | A             | B             | C             | D             | E                     | F             |
| Front Panel Mount        | Rear Panel Mount |        | mm.<br>± 0.08 | mm.<br>± 0.05 | mm.<br>± 0.05 | mm.<br>± 0.05 | mm.<br>+ 0.13, - 0.00 | mm.<br>± 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          |