

# TA324-M12A

**Dual Output, Temperature/Acceleration, Side Exit M12 Connector,  
Low Power, 25 mV/g, 10 mV/°C**

Actual  
Product  
Size Shown



## Product Features

**Ultra Low Power Sensor For Battery  
Powered Transmission Systems**

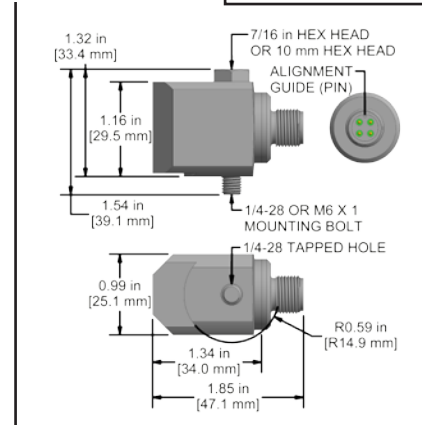
**Temperature Output**

- 4 Pin M12 Connector
- Supply Voltage 4-6 Volts
- Compatible with Many Wireless Transmission Systems

### TA324-M12A

4 Pin Connector

| Connector Pin | Polarity         |
|---------------|------------------|
| 1             | (+) Signal/Power |
| 2             | (-) Common       |
| 3             | Not Used         |
| 4             | Not Used         |



| Specifications                | Standard             | Metric         |
|-------------------------------|----------------------|----------------|
| Part Number                   | TA324-M12            | M/TA324-M12    |
| Sensitivity (±10%)            | 25 mV/g              |                |
| Frequency Response (±3dB)     | 30-60,000 CPM        | 0.5-10000 Hz   |
| Frequency Response (±10%)     | 60-480,000 CPM       | 1,0-8000 Hz    |
| Dynamic Range                 | ± 50 g, peak         |                |
| Temperature Measurement Range | -40° to 250°F        | -40° to 121° C |
| Temperature Output            | 10 mV/°C             |                |
| Electrical                    |                      |                |
| Settling Time                 | <1.0 second          |                |
| Power Supply Voltage          | 4-6 VDC (10%)        |                |
| Spectral Noise @ 10 Hz        | 60 µg/√Hz            |                |
| Spectral Noise @ 100 Hz       | 20 µg/√Hz            |                |
| Spectral Noise @ 1000 Hz      | 5 µg/√Hz             |                |
| Output Impedance              | <100 ohm             |                |
| Bias Output Voltage           | 2.5 V ± 10%          |                |
| Case Isolation                | >10 <sup>8</sup> ohm |                |
| Supply Current                | < 100 µA             |                |

| Specifications           | Standard             | Metric            |
|--------------------------|----------------------|-------------------|
| Environmental            |                      |                   |
| Temperature Range        | -58 to 250°F         | -50 to 121°C      |
| Maximum Shock Protection | 5,000 g, peak        |                   |
| Sealing                  | Welded, Hermetic     |                   |
| Physical                 |                      |                   |
| Sensing Element          | PZT Ceramic          |                   |
| Sensing Structure        | Shear Mode           |                   |
| Weight                   | 5.1 oz               | 145 grams         |
| Case Material            | 316L Stainless Steel |                   |
| Mounting                 | 1/4-28               |                   |
| Connector (non-integral) | 3 Pin MIL-C-5015     |                   |
| Resonant Frequency       | 1,260,000 CPM        | 21000 Hz          |
| Mounting Torque          | 2 to 5 ft. lbs.      | 2.7 to 6.8 Nm     |
| Mounting Hardware        | 1/4-28 Stud          | M6x1 Adapter Stud |
| Calibration Certificate  | CA10                 |                   |

## Ordering Information

|          |                                     |               |
|----------|-------------------------------------|---------------|
| Standard | TA324-M12A<br>(1/4-28 Stud)         | Stock Product |
| Metric   | M/TA324-M12A<br>(M6x1 Adapter Stud) | Stock Product |



VIBRATION ANALYSIS HARDWARE

**Backed by our Unconditional Lifetime Warranty**