

ADAM-3016

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Isolated Strain Gauge Input Module

External Powered IEPE Signal Conditioner



ADAM-3016



Specifications

I/O

- **Accuracy** $\pm 0.1\%$ of full range
- **Bandwidth** 2.4 kHz (typical)
- **Isolation Mode Rejection** > 100 dB @ 50 Hz/60 Hz
- **Current Output** Current: 0 ~ 20 mA
Current load resistor: 0 ~ 500 Ω (Source)
- **Stability (Temperature Drift)** 150 ppm (typical)
- **Voltage Specifications** Electrical input: ± 10 mV, ± 20 mV, ± 30 mV, ± 100 mV
Excitation voltage: 1 ~ 10 V_{DC} (60 mA max)
- **Voltage Output** Bipolar: ± 5 V, ± 10 V
Unipolar: 0 ~ 10 V
Impedance: < 50 Ω

General

- **Connectors** Screw terminal
- **Enclosure** ABS
- **Indicators** Power LED indicator
- **Isolation** 1,000 V_{DC} (Three-way)
- **Power Consumption** ≤ 1.85 W (voltage output)
 ≤ 2.15 W (current output)
- **Power Input** 24 V_{DC} $\pm 10\%$
- **Dimensions (W x H x D)** 23.2 x 101 x 93.5 mm (0.91" x 3.97" x 3.68")
- **Operating Temperature** -10 ~ 70 °C (14 ~ 158 °F)
- **Storage Temperature** -25 ~ 85 °C (-13 ~ 185 °F)

Ordering Information

- **ADAM-3016** Isolated strain gauge input module

Preliminary



ADAM-3017



Specifications

Integrated Electronic Piezoelectric (IEPE) Excitation

- **Channels** 1
- **Upper Cut-Off Frequency (for all couple settings)**
 - x1, x10 gain (-5%) 100 kHz
 - x100 gain (-1%) 50 kHz
- **Lower Cut-Off Frequency (-3dB, 1 M Ω load, for all gain settings)**
 - DC Couple DC
 - AC Couple (1 μ F) 0.58 Hz
 - AC Couple (47 μ F) 0.012 Hz
- **Accuracy** $< \pm 2\%$ for all gain settings
- **Compliance** > 24 V
- **Current** 0, 4, 6, or 10 mA $\pm 5\%$
- **Discharge Time Constant (1 M Ω load, for all gain settings)**
 - DC Couple 0 second
 - AC Couple (1 μ F) > 0.3 seconds
 - AC Couple (47 μ F) > 13 seconds
- **DC Offset** < 30 mV

Isolation Protection

- **Input/Output to Power** 1,000 V_{DC}

General

- **I/O Connectors** Screw terminal
(Including a female BNC to terminal block adaptor)
- **Dimensions (W x H x D)** 23.2 x 101 x 93.5 mm (0.91" x 3.97" x 3.68")
- **Operating Temperature** 0 ~ 60 °C (32 ~ 140 °F)
- **Storage Temperature** -20 ~ 70 °C (-4 ~ 158 °F)
- **Storage Humidity** 5 ~ 95% RH, non-condensing

Ordering Information

- **ADAM-3017-AE** Externally powered IEPE signal conditioner