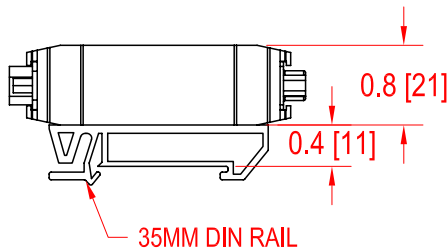
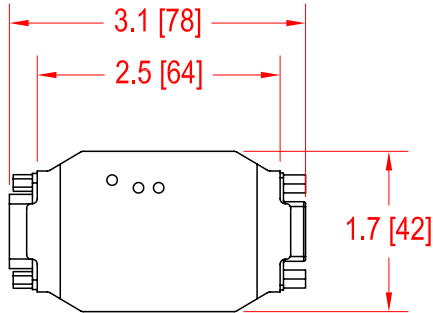


GENERAL PURPOSE DIN RAIL AMPLIFIER MODULE  
DC POWERED, UNIVERSAL STRAIN GAGE SIGNAL CONDITIONER



¡ Tu Sitio de Automatización !

Drawing Number: FI1045-J  
INCH [mm] | R.O.= Rated Output



FEMALE DB 9  
SENSOR SIDE

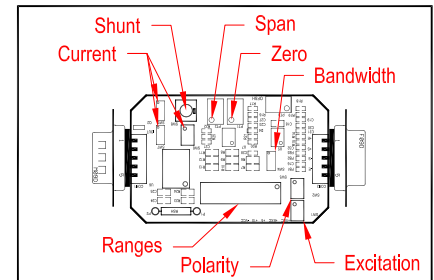
| PIN # | WIRING CODE  |
|-------|--------------|
| 1     | +EXCITATION* |
| 2     | +SIGNAL      |
| 3     | -SIGNAL      |
| 4     | -EXCITATION* |
| 5     | GROUND       |
| 6     | GROUND       |
| 7     | GROUND       |
| 8     | GROUND       |
| 9     | GROUND       |

\*FOR 6 WIRE SENSOR CONNECT +SENSE TO +EXCITATION AND -SENSE TO -EXCITATION OR GROUND

MALE DB 9 - POWER SIDE

| PIN # | WIRING CODE            | CABLE COLOR CODE |
|-------|------------------------|------------------|
| 9     | POWER SUPPLY           | RED              |
| 8     | SIGNAL OUT (VOLTAGE)   | GREEN            |
| 7     | GROUND                 | ORANGE           |
| 6     | GROUND                 | BLACK            |
| 5     | GROUND                 | N/A              |
| 4     | GROUND                 | N/A              |
| 3     | GROUND                 | N/A              |
| 2     | GROUND                 | BLUE             |
| 1     | SIGNAL OUT (CURRENT)** | WHITE            |

\*\*ONLY AVAILABLE WITH CURRENT OUTPUT OPTION



**Do Not Connect Device To Power Supply When Power Supply Is Already On!**

Features

- Bipolar Output, Differential Input
- ± 5 or ± 10 VDC Outputs
- 0-20 mA , 4-20 mA , 0-16 mA , 5-25 mA DIP Switch Selectable Outputs
- Bridge Excitation 5 or 10 VDC
- Ranges: 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 4.0, 10.0 mV/V (DIP Switch)
- Interchangeable Socket Mounted 60.4K Ω Shunt Cal
- Externally Accessible Shunt Cal Activation Button
- Internal Span and Offset Adjust Resistor Locations
- Sensor Polarity Reversal DIP Switch
- Weight: 1.6 oz [45 g]

Environment

| Parameter             | Min | Typ | Max | Unit |
|-----------------------|-----|-----|-----|------|
| Operating Temperature | 32  |     | 158 | °F   |
|                       | 0   |     | 70  | °C   |
| Storage Temperature   | -40 |     | 185 | °F   |
|                       | -40 |     | 85  | °C   |

Relative Humidity: 95% at 100 °F [39 °C]  
IP Rating IP31

Notes

1. Adjusting Zero Will Not Affect Calibration.
2. Adjusting Span Will Affect Calibration.
3. Power Supply Must Source 150mA Minimum.
4. Carefully Remove Cover To Access DIP Switches.

Electrical Specifications

| Parameter                          | Min               | Typ | Max   | Unit    |
|------------------------------------|-------------------|-----|-------|---------|
| Power Supply                       | 14 <sup>(1)</sup> |     | 26    | VDC     |
| Current Dissipation <sup>(2)</sup> |                   | 30  |       | mA      |
| Output Impedance (voltage)         | 1000              |     |       | Ohms    |
| Output Impedance (current)         |                   |     | 500   | Ohms    |
| Sensor Impedance                   | 100               |     |       | Ohms    |
| Bandwidth                          | 1000              |     | 25000 | Hz      |
| Common Mode Rejection Ratio        | 120               |     |       | dB      |
| Noise                              |                   | 15  |       | mV p-p  |
| Output Span Range                  | -10               |     | 10    | % of RO |
| Output Zero Range                  | -10               |     | 10    | °       |
| Gain Drift With Temperature        | -25               | x   | 25    | °       |
| Gain Non-Linearity                 | -0.001            | x   | 0.001 | °       |
| Zero Drift With Temperature        | -25               | x   | 25    | °       |

Versions

| Item #   | Bandwidth             | Output   |
|----------|-----------------------|--|
| FSH01449 | 1 kHz                 | +/-5 VDC , +/-10 VDC , 0-20 mA , 4-20 mA , 0-16 mA , 5-25 mA |
| FSH03546 | 1 kHz                 | +/-5 VDC , +/-10 VDC   |
| QSH00602 | 10 kHz <sup>(3)</sup> | +/-5 VDC , +/-10 VDC , 0-20 mA , 4-20 mA , 0-16 mA , 5-25 mA |
| QSH01498 | 25 kHz <sup>(4)</sup> | +/-5 VDC , +/-10 VDC , 0-20 mA , 4-20 mA , 0-16 mA , 5-25 mA |

Accessories And Options

| Description  | Item Number |
|--|-------------|
| 26 AWG, 6 Conductor 5 ft Long Cable w/ Yellow Molded DB9 Female (Included) | FSH03219    |
| DB9 Male With Housing (Included)   | FSH01075    |
| 28 AWG 4 Conductor 5 ft Long Cable w/ DB9 Male                             | FSH01129    |
| Blocks (Sensor Side)   | FSH02236    |
| al Blocks (Output Side)  | FSH02237    |
| 5 VDC  |             |

(3) Only For Sensitivity Of 1 mV/V or Greater  
(4) Only For Sensitivity Of 1.5 mV/V or Greater