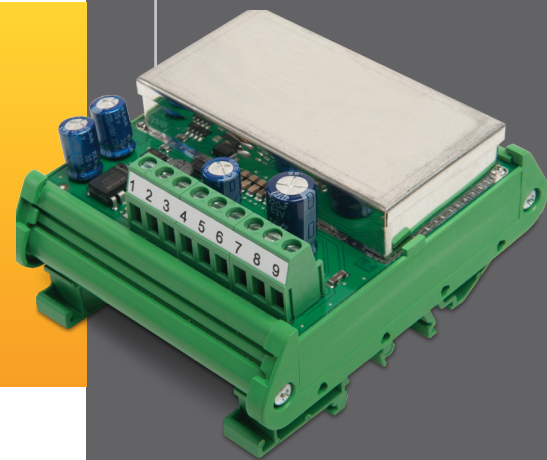




## Analog Transmitter

# JF Series

**The JF Series is a efficient, compact analog transmitter with selectable ranges and adjustment capabilities. The JF Series is DIN rail mountable and powers up to four 350 ohm transducers.**



### Key Features

- Selectable Input Ranges of 0-10 mV, 0-20 mV or 0-30 mV
- Pre-Set Output Formats Of 0-20 mA Or 0-10 VDC (Bi-polar)
- Field Fine Tune Adjustment of Span and Zero Offset Parameters
- 10 VDC Bridge Excitation
- Powers up to Four 350 Ohm Bridge Transducers
- Drives up to 500 Ohm Loop Resistance

### Other Features

- High Performance Precision Amplifier
- Adjustable Analog Filter for Optimum Signal Stability
- CE Conformity
- DIN Rail Mount
- Designed for Use in "Electrically Noisy" Industrial Environments
- Easy Setup and Calibration
- NEMA 4/4X (IP66) and Explosion-Proof Housings are Available
- Power LED
- Optional Din Rail Mount Power Supply (Model KF3)
- One Year Warranty



KF3 POWER SUPPLY

### APPLICATIONS

- Strain Gage Measurement
  - › Load Cells
  - › Force Transducers
  - › Torque Transducers
  - › Pressure Transducers
- Single or "Summed" Transducers
- Interface To PLC/DCS
- Process Control
- Weighing Systems
- Level Monitoring and Control
- Cost Effective OEM/VAR Solutions



For more information call **1-888-545-8988**

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888-545-8988 T: 909-605-1544 FAX: 909-605-6305 [www.sentranllc.com](http://www.sentranllc.com)



## OPERATOR INTERFACE

|                      |  |
|----------------------|--|
| Status Annunciators: | 1; Red LED for power   |
| Calibration Method:  | Two-Point; Zero and Span; Fine tuning potentiometers                       |
| Range Selection:     | Dip switches; 10 mV, 20 mV or 30 mV  |
| Wiring Connections:  | 9-Position screw terminal strip for Power, Load cell I/O and Analog output |

## INPUTS/OUTPUTS

|                                     |   |
|-------------------------------------|---|
| Input Compatibility:                | Strain gage; Up to (4) four 350 ohm full bridge transducers; Up to (8) eight 700 ohm full bridge transducers; Peripheral summing interface required for more than (1) transducer input (Refer to SENTRAN N Series Summing/ Junction Boxes.) |
| Output Formats (Jumper Selectable): | Voltage: 0-10; 2KOhm minimum load<br>Current: 4-20 mA; 500 Ohm maximum load   |

## FUNCTIONAL PARAMETERS

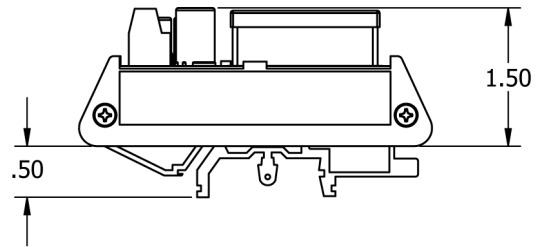
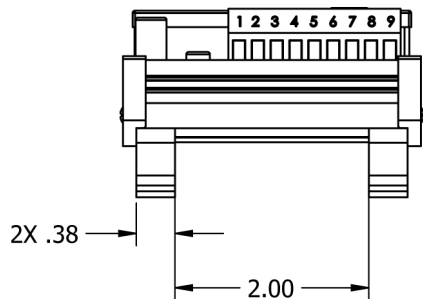
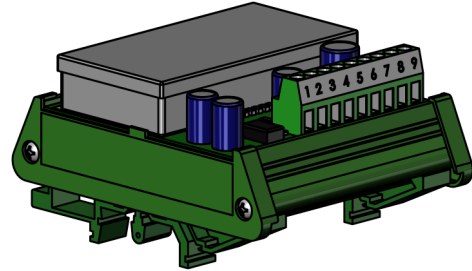
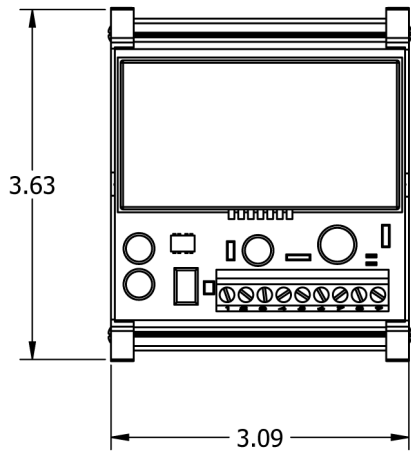
|                            |   |
|----------------------------|---|
| Linearity:                 | Better Than Or Equal To 0.2% Full Scale (FS)                          |
| Measurement Response Rate: | 70ms typical  |
| Span Range @ Full Scale:   | Three ranges: 10 mV, 20 mV or 30 mV; Dip switch selectable            |
| Span Adjustment:           | ±5% via 20-turn potentiometer   |
| Zero Offset:               | 10%; +3% to -7% via 20-turn potentiometer                             |
| Bridge Excitation Voltage: | 10 VDC  |
| Excitation Current Rating: | 200 mA; (4) 350 ohm bridge transducers                                |
| Remote Sensing:            | Six wire compatible   |
| Low Pass Filter:           | Time Constant Adjustable via trimming potentiometer; 5-100 ms         |
| Common Mode Rejection:     | 100dB (minimum)   |
| Power (Standard):          | 24 VDC ± 15%  |
| Power (Optional):          | Model KF3 DIN rail mount supply; 115/230 VAC ±10% (50/60Hz) to 24 VDC |
| Power Consumption:         | 5 Watts   |

## ENVIRONMENTAL

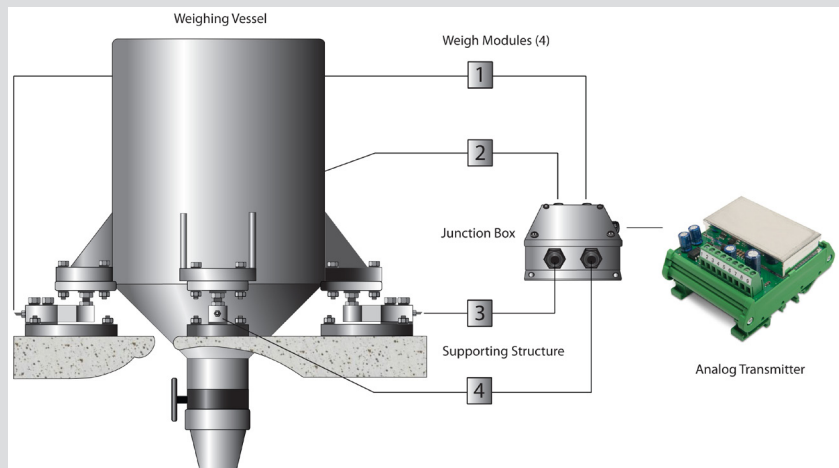
|                                |  |
|--------------------------------|--|
| Compensated Temperature Range: | -10° To +40 °C / 14° F To 104°F  |
| Operating Temperature Range:   | -10° To +50 °C / 14° F To 122°F  |
| Storage Temperature Range:     | -20° To +55° C / -4° F To 131° F   |
| Temperature Stability:         | Better Than 20ppm/°C   |
| Humidity Range:                | 0 To 85% RH; Non-condensing  |
| CE Conformity:                 | EN50081-1 E EN 50082-2 EMC; EN61010-1 LVD                                  |
| Construction:                  | Thermal-form ABS plastic chassis; Metal-jacketed signal processing section |
| Dimensions:                    | 3.0" (76mm) high X 3.5" (90mm) wide X 2.5" (65mm) deep                     |
| Weight:                        | 4.25 ounces (0.11kg)   |
| Warranty:                      | One year; Limited  |

## OPTIONS

|                           |  |
|---------------------------|--|
| Power Supply Module:      | Model KF3; 115/230 VAC ±10% (50/60Hz) to 24 VDC; DIN rail mountable                        |
| Four Channel Transmitter: | Model KJ3-B; Supports (4) four discrete load cell inputs                                   |
| Enclosures:               | NEMA 4/4X; Reinforced Fiberglass, Powder-coated steel and stainless steel; Explosion-proof |



## Typical Weighing System



## Legal Disclaimer



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