



# JF3-B

## MULTI-CHANNEL ANALOG TRANSMITTER

### *applications*

- ▶ Strain Gage Measurements
  - Load Cells
  - Force Transducers
  - Torque Transducers
  - Pressure Transducers
- ▶ Transducer Interface To PLC/DCS
- ▶ Process Control
- ▶ Weighing Systems
- ▶ Level Monitoring and Control
- ▶ Intrinsically Safe Applications
- ▶ Cost Effective OEM/VAR Solutions



### *features*

- High Performance, Measurements-Grade Power Supply And Precision Amplifier
- Integrated Summing For Up To Four Load Cells/Transducers
- Selectable Input Ranges From 0-3 to 0-30 mV
- Pre-Set Output Formats Of 0-5 or 0-10 VDC and 0-20 or 4-20 mA
- Field Course and Fine Tune Adjustment Of Span And Zero Offset Parameters
- 10 VDC Bridge Excitation
- Powers Up To Four 350 Ohm Bridge Load Cells/Transducers
- Drives Up To 500 Ohm Loop Resistance
- 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 And Explosion-Proof Housings Are Available
- Optional Din Rail Mount 115/230 VAC @ 50/60 Hz Power Supply (Model KF3)
- One Year Warranty

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KF3 POWER SUPPLY

*Innovative Measurement Solutions*





## operator interface

Calibration Method: Two-Point; Zero and span; Fine tuning potentiometers  
 Range Selection: Dip switch selectable; 0-3 to 0-30 mV  
 Wiring Connections: 20-position screw terminal strip for power, Load cells I/O and analog output

## inputs/outputs

Input Compatibility: Strain gage; Up to (4) four 350 ohm full bridge transducers.  
 Output Formats: Voltage: 0-5 or 0-10VDC; 2K ohm minimum load  
 Current: 0-20 or 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: Dip switch selectable; 0-3 to 0-30 mV  
 Span Adjustment: Course and fine adjustments  
 Zero Offset: Course and fine adjustments  
 Bridge Excitation Voltage: 10 VDC  
 Excitation Current Rating: 200 mA  
 Low Pass Filter: Time constant adjustable from 0.1 to 1.5 seconds via trim potentiometer  
 Common Mode Rejection: 100dB (minimum)  
 Power (Standard): 24 VDC  $\pm$  15%  
 Power (Optional): 115/230 VAC  $\pm$ 10% @ 50/60Hz; DIN rail mountable power supply Model KF3  
 Power Consumption: 6 Watts

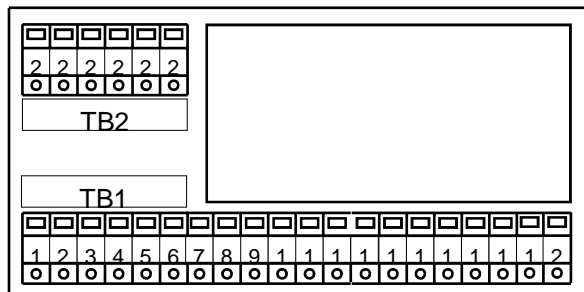
## environmental

Operating Temperature Range: -10° To +40 °C / 14° F To 104°F  
 Storage Temperature Range: -20° To +50° C / -4° F To 122° F  
 Temperature Stability: Better than 20ppm/°C  
 Humidity Range: 0 To 85% RH; Non-condensing  
 CE Conformity: EN50081-1 e  
 Construction: Thermal-form ABS plastic chassis; Metal-jacketed signal processing section  
 Dimensions: 5.3" (135mm) long X 3.6" (91mm) wide X 2.7" (66mm) deep  
 Weight: 8 ounces (0.23kg)  
 Warranty: One year; Limited

## options

Power Supply Module: Model KF3; 115/230 VAC  $\pm$ 10% @ 50/60Hz; DIN rail mountable  
 Single Channel Transmitter: Model JF3; Supports up to (4) four summed load cell inputs  
 Enclosures: NEMA 4/4X; Reinforced fiberglass, Powder-coated steel and stainless steel; Explosion-proof

connections



TB1		TB2
1. - Excitation (cell # 1)	11. - Excitation (cell # 3)	21. + 4/20 mA
2. + Excitation (cell # 1)	12. + Excitation (cell # 3)	22. + 0-5 / 0-10 Vdc
3. - Signal (cell # 1)	13. - Signal (cell # 3)	23. - Analog Output
4. + Signal (cell # 1)	14. + Signal (cell # 3)	24. - 24 Vdc (supply)
5. Shield	15. Shield	25. + 24 Vdc (supply)
6. - Excitation (cell # 2)	16. - Excitation (cell # 4)	26. Ground
7. + Excitation (cell # 2)	17. + Excitation (cell # 4)	
8. - Signal (cell # 2)	18. - Signal (cell # 4)	
9. + Signal (cell # 2)	19. + Signal (cell # 4)	
10. Shield	20. Shield	