



JB

MULTI-CHANNEL ANALOG TRANSMITTER

applications

- ▶ 2 to 4 Channel Load Cell Summing
- ▶ System Interface To PLC/DCS
- ▶ Integrated Process Control Node
- ▶ Stand-Alone Weighing Systems
- ▶ Level Monitoring and Control
- ▶ Tank Farm Management
- ▶ Intrinsically Safe Applications
- ▶ Cost Effective OEM/VAR Solutions
- ▶ High Deadload/Low Liveload Weighing

VESSEL WEIGHING



FIELD RANGABLE!



features



- High Performance Measurements-Grade Power Supply And Precision Amplifier
- Range Of Selectable Output Formats For Voltage Or Current
- Input, Output, Excitation And Zero Offset Parameters Are Field Configurable
- Compatible With Single Or Multiple "Summed" Transducers
- Preload Offsets Adjustable Up To 100% of Span Range
- Drives Up To 1000 Ohm Loop Resistance
- Linear Optical Isolation Of The Input, Output And Power Supply Eliminates Ground Loop Potential, Provides Common Mode Rejection And Reduces Noise Pickup
- Remote Sensing Is Selectable And Maintains Constant Voltage At the Transducer(s)
- Dedicated NEMA 4/4X Enclosure Or Panel Mount
- No Interaction Between Zero And Span
- Designed For Use In "Electrically Noisy" Industrial Environments
- Functional Test/System Calibration Pushbutton
- Switchable Load Cell Inputs Facilitate Sensitivity Tuning and Troubleshooting
- Excitation and Signal Trimming Potentiometers
- Easy Setup And Calibration
- Multiple LED's Monitor Input And Output Signal Levels
- Powers Up To (4) 350 Ohm or Greater Transducers
- The JB Series Is Compatible With The JA Series Signal Conditioning Plug-In Module
- One Year Warranty

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Innovative Measurement Solutions





operator interface

Status Annunciators:
Functional Test Pushbutton:

Calibration Method:

Adjustments:

Summing Board Adjustments:



JB - BOARD ONLY

2; Red LED for output; Green LED for input; Variable intensity. Adjustable to 0-100% of calibrated range using integral potentiometer; Imposes preadjusted signal on the output, independent of any input signal. Range selection; Known signal input; Fine tuning potentiometer; Non-interactive zero and span signals eliminate "crosstalk" influences. Integral potentiometers & switches; Zero offset (deadload); Transducer input ranging; Transmitter output ranging; Excitation voltage.

INT/EXT (SW2); Slide switch; "Internal" when used with JA module; "External" when used as a simple summing board (No JA module). Transducer Enable (SW1-1/4); Slide switch; "ON" enables transducer measuring; "OFF" disables transducer measuring. Signal Adjustment Potentiometers; 25 turn; Attenuates measurement signal; One per transducer channel. Excitation Adjustment Potentiometers; 25 turn; Attenuates excitation voltage; One per transducer channel.

functional parameters

Linearity:
Measurement Response Rate:
Span Range @ Full Scale:
Zero Offset:
Bridge Excitation Voltage:
Excitation Current Rating:
Excitation Stability:
Common Mode Rejection
Input Impedance:
Isolation:
Remote Sense Compensation:
Power:



JA ISOLATED TRANSMITTER MODULE

Better Than Or Equal To 0.1% Full Scale (FS)
70ms typical; Down to 10ms available (Optional)
Field selectable; 0 To 5 mV (minimum); 0 To 400 mV (maximum)
Field selectable; 0-100%; 15% increments
Field selectable; 1-10 VDC; 1 volt increments; Fine adjustment of ±5%
120 mADC @ 10VDC; Up To 4 (8) Summed 350 Ω (700 Ω) Bridges
.005%/°F (.01%/°C)
100dB (minimum)
200K (typical)
2000V RMS (minimum)
Better Than 0.01%/1 Ω Change in Lead Resistance
115 VAC ±10% @ 50/60Hz; 3.5W (maximum)
230 VAC ±10% @ 50/60Hz; 2.5W (maximum); Optional
9-30 VDC @ 3W with four 350 Ω bridges; Optional

environmental

Operating Temperature Range:
Storage Temperature Range:
Temperature Stability:
Humidity Range:
Board Dimensions:
Optional Enclosure Construction:
Enclosure Dimensions:
Weight:
Warranty:

-10° To +60 °C / 14° F To 140°F
-20° To +70° C / -4° F To 158° F
Better Than 0.02% of Span/°C
0 To 95% RH; Non-condensing
8.75" high X 6.85" wide X 1.0" deep (3.75" deep w/ JA module)
NEMA 4/4X steel or stainless steel
10" high X 8" wide X 4" deep (nominal)
> 11 lbs. (5 kg)
One year; Limited

output

Output Ranges:

Optically isolated; Field selectable; Drives up to 1000 ohm load resistance

Output Capability:

Voltage: 0-1 VDC (minimum); ±10 VDC (maximum)
Current: 0-2 mA (minimum); 4-20 mA, 0-20 mA (maximum)
Voltage: ± 10VDC @ ± 10 mA
Current: 20 mADC; 20 V compliance

options

Relay Modules

All the Environmental features of the JA Series; Setpoint adjustment 0 to 100% of Span; Deadband adjustment 1 to 100% of Span; Single or double relay modules; 7A contacts @ 240 VAC (resistive load); 3.5 A contacts @ 240 VAC (inductive load)

Other Options and Accessories:

8-pin or 11-pin sockets, DIN or surface mount; Aluminum DIN rail; Plastic Snap Track; NEMA 4/4X enclosures; Explosion-proof enclosures ; DC power