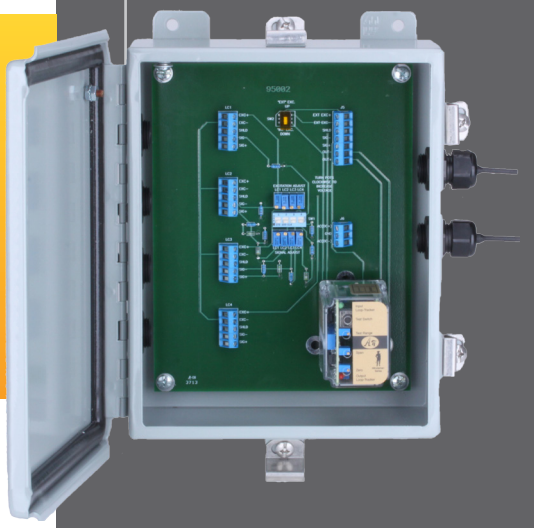
SENTRAN

Isolated Multi-Channel Analog Transmitter

JB Series

The JB Series is a powerful and versatile measurements grade analog transmitter featuring a range of selectable output formats for voltage or current and is capable of supporting up to four "summed" transducers.



Key Features

- Range of Selectable Output Formats for Voltage or Current
- Input, Output, Excitation and Zero Offset Parameters are Field Configurable
- 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
- Remote Sensing is Selectable and Maintains Constant Voltage Levels at the Transducer(s)
- Powers up to (4) 350 Ohm or Greater Transducers
- AC or DC Power Options

Other Features

- High Performance Measurements-Grade Power Supply and Precision Amplifier
- Compatible with Multiple "Summed" Transducers
- Provides Common Mode Rejection and Reduced Noise Pickup
- Dedicated NEMA 4/4X (IP66) Enclosure or Panel Mount PCBA Version
- 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
- Stainless Steel and X-P Enclosure Options
- One Year Warranty

APPLICATIONS

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

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

ISO 9001:2008 CERTIFIED

SENTRAN, LLC 4355 LOWELL STREET, ONTARIO, CA 91761, U.S.A.
888-545-8988 T: 909-605-1544 FAX: 909-605-6305 **www.sentranllc.com**

OPERATOR INTERFACE

Status Annunciators:	2; Red LED for output; Green LED for input; Variable intensity.
Functional Test Push button:	Adjustable to 0-100% of calibrated range using integral potentiometer; Imposes preadjusted signal on the output, independent of any input signal.
Calibration Method:	Range selection; Known signal input; Fine tuning potentiometer; Non-interactive zero and span signals eliminate "crosstalk" influences.
Adjustments:	Integral potentiometers & switches; Zero offset (deadload); Transducer input ranging; Transmitter output ranging; Excitation voltage.
Summing Board Adjustments:	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 mea suring. 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:	Better Than Or Equal To 0.1% Full Scale (FS)
Measurement Response Rate:	70ms typical; 10ms available (Optional)
Span Range @ Full Scale:	Field selectable; 0 To 5 mV (minimum); 0 To 400 mV (maximum)
Zero Offset:	Field selectable; 0-100%; 15% increments
Bridge Excitation Voltage:	Field selectable; 1-10 VDC; 1 volt increments; Fine adjustment of ±5%
Excitation Current Rating:	120 mADC @ 10VDC; Up To 4 (8) Summed 350 Ω (700 Ω) Bridges
Excitation Stability:	.005%/°F (.01%/°C)
Common Mode Rejection:	100dB (minimum)
Input Impedance:	200K (typical)
Isolation:	2000V RMS (minimum)
Remote Sense Lead Compensation:	Better Than 0.01%/1 Ω Change in Lead Resistance
Power:	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:	-10° To +60 °C / 14° F To 140°F
Storage Temperature Range:	-20° To +70° C / -4° F To 158° F
Temperature Stability:	Better Than 0.02% of Span/°C
Humidity Range:	0 To 95% RH; Non-condensing
Board Dimensions:	8.75" high X 6.85" wide X 1.0" deep (3.75" deep w/ JA module)
Optional Enclosure Construction:	NEMA 4/4X steel or stainless steel
Enclosure Dimensions:	10" high X 8" wide X 4" deep (nominal)
Weight:	> 11 lbs. (5 kg)
Warranty:	One year; Limited

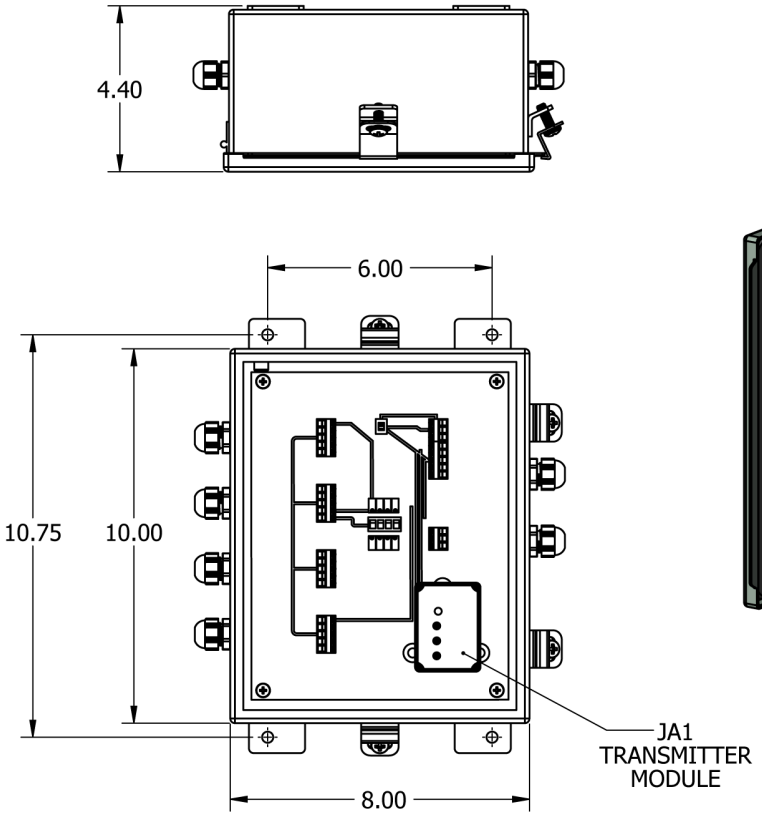
OUTPUT

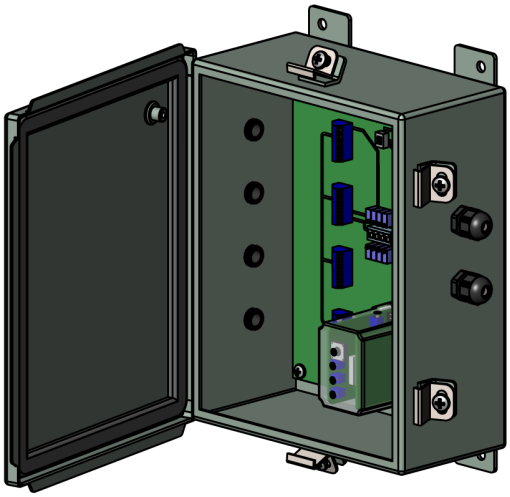
Output Ranges:	Optically isolated; Field selectable; Drives up to 1000 ohm load resistance
Output Capability:	Voltage: 0-1 VDC (minimum); ±10 VDC (maximum) Current: 0-2 mA (minimum); 4-20 mA, 0-20 mA (maximum) Voltage: ± 10VDC @ ± 10 mA Current: 20 mADC; 20 V compliance

OPTIONS

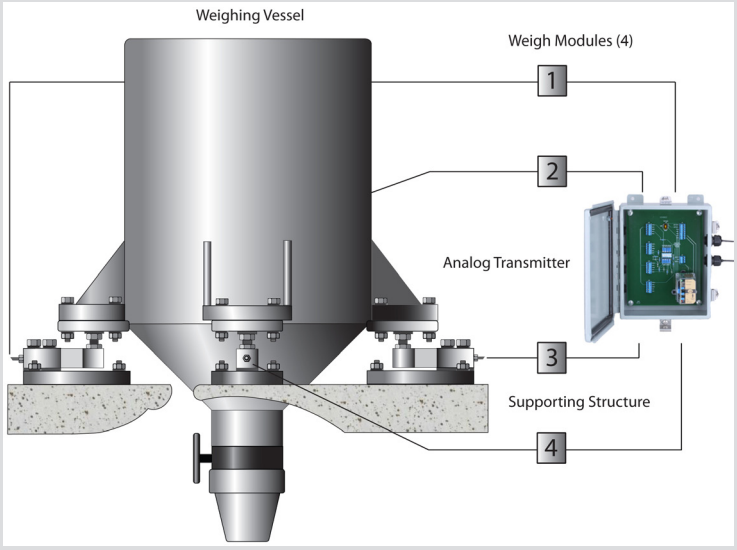
Relay Modules:	Setpoint adjustment 0 to 100% of Span; Deadband adjustment 1 to 100% of Span; Single or double relay modules; 7A contacts @ 240 VAC (resistive load); 3.5 A contacts @ 240 VAC (inductive load).
Fast Response:	10ms response time
Other Options:	11-pin sockets, DIN or surface mount; Aluminum DIN rail; NEMA 4/4X enclosures; Explosion-proof enclosures; DC power.

JB Series Dimensions





Typical Weighing System



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SENTRAN, LLC
4355 LOWELL STREET
ONTARIO, CA 91761-2225, U.S.A.
T: 909-605-1544 F: 909-605-6305
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