



Isolated Multi-Channel Analog Transmitter

JB Series

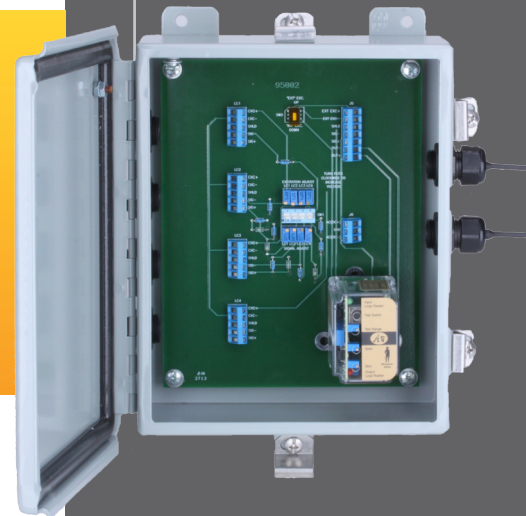
The JB Series is a powerful and versatile measurements grade analog transmitter featuring a range of selectable output formats for voltage or current and is capable of supporting up to four “summed” transducers.

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**

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 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:	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 $\pm 5\%$
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 $\pm 10\%$ @ 50/60Hz; 3.5W (maximum) 230 VAC $\pm 10\%$ @ 50/60Hz; 2.5W (maximum); Optional 9-30 VDC @ 3W with four 350 Ω bridges; Optional

ENVIRONMENTAL

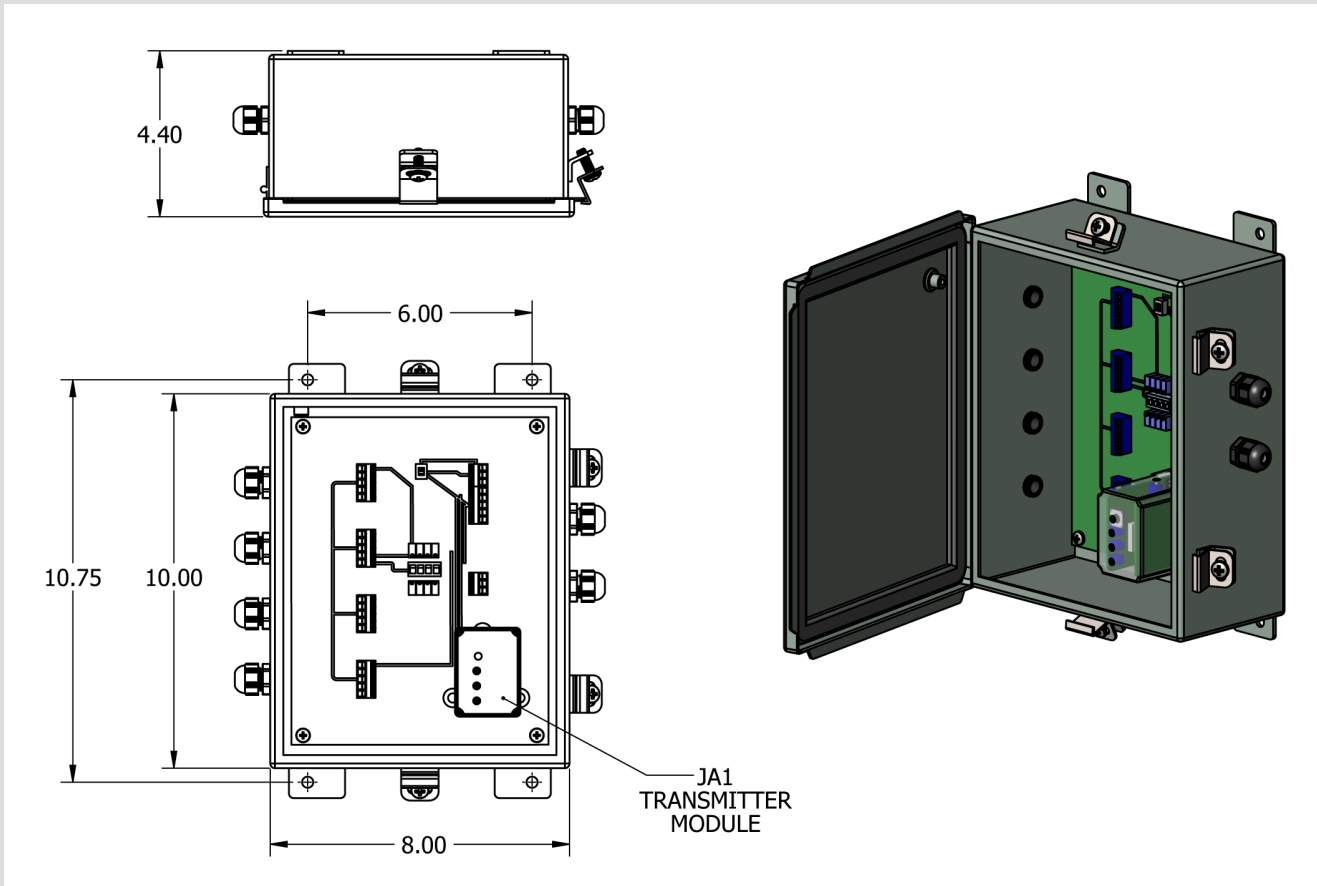
Operating Temperature Range:	-10° To +60 °C / 14° F To 140°F
Storage Temperature Range:	-20° To +70° C / -4° F To 158° F
Temperature Stability:	Better Than 0.02% of Span/°C
Humidity Range:	0 To 95% RH; Non-condensing
Board Dimensions:	8.75" high X 6.85" wide X 1.0" deep (3.75" deep w/ JA module)
Optional 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

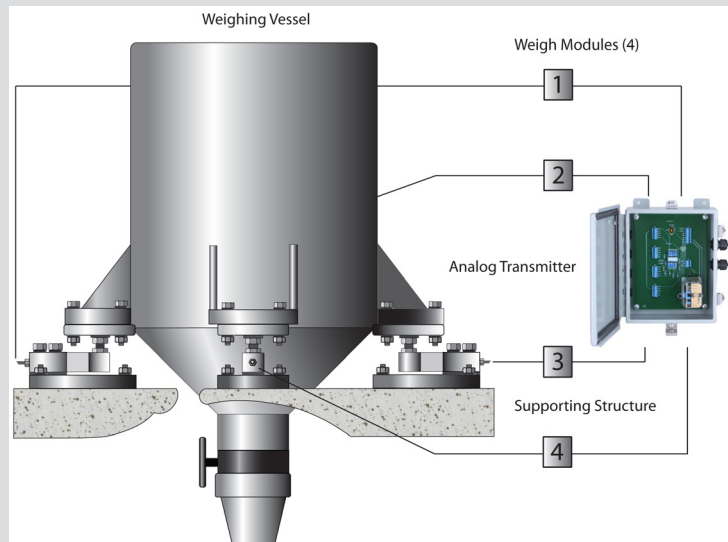
Output Ranges:	Optically isolated; Field selectable; Drives up to 1000 ohm load resistance
Output Capability:	Voltage: 0-1 VDC (minimum); ± 10 VDC (maximum) Current: 0-2 mA (minimum); 4-20 mA, 0-20 mA (maximum) Voltage: ± 10 VDC @ ± 10 mA Current: 20 mADC; 20 V compliance

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.



Typical Weighing System



Legal Disclaimer



ALL PRODUCTS, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Sentran, LLC, Incorporated, its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Sentran, LLC"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product. The product specifications do not expand or otherwise modify Sentran, LLC's terms and conditions of purchase, including but not limited to, the warranty expressed therein. Sentran, LLC makes no warranty, representation or guarantee other than as set forth in the terms and conditions of purchase. To the maximum extent permitted by applicable law, Sentran, LLC, disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability. Information provided in datasheets and/or specifications may vary from actual results in different applications and performance may vary over time. Statements regarding the suitability of products for certain types of applications are based on Sentran, LLC's knowledge of typical requirements that are often placed on Sentran, LLC products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. No license, express, implied, or otherwise, to any intellectual property rights is granted by this document, or by any conduct of Sentran, LLC. The products shown herein are not designed for use in life-saving or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Sentran, LLC products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Sentran, LLC for any damages arising or resulting from such use or sale. Please contact authorized Sentran, LLC personnel to obtain written terms and conditions regarding products designed for such applications.



SENTRAN, LLC

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

www.sentranllc.com

Innovative Measurement Solutions

