



Isolated Rangeable Analog Transmitter

JA Series

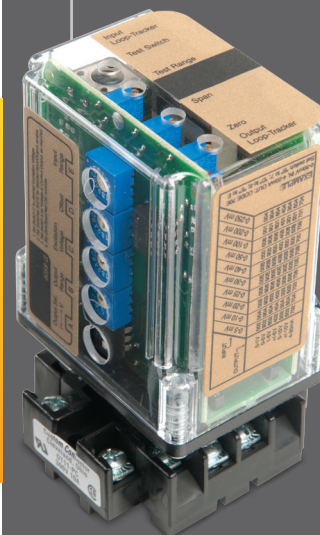
The JA Series is a powerful and versatile measurements grade analog transmitter featuring a range of selectable output formats for voltage or current and is compatible with single or multiple “summed” transducers.

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 Loop Potential
- Remote Sensing is Selectable to Maintain Constant Voltage Levels at the Transducer(s)
- Powers up to (4) 350 Ohm and up to (8) 700 Ohm Transducers
- AC or DC Power Options

Other Features

- Common Mode Rejection and Reduced Noise Pickup
- DIN Rail or Panel Mount Using Industry Standard Plug-N-Play 11-Pin Socket
- No Interaction Between Zero and Span
- Designed for Use in “Electrically Noisy” Industrial Environments
- Compatible With Single or Multiple “Summed” Transducers
- Functional Test/System Calibration Pushbutton
- Easy Setup and Calibration
- Multiple LED's Monitor Input and Output Signal Levels
- Compact Case Dimensions of Only 2.75" High X 2.38" Wide X 1.75" Deep
- Optional Summing Module in a NEMA 4/4X (IP66) Enclosure
- High Performance Measurements-Grade Power Supply and Precision Amplifier
- NEMA 4/4X (IP66) and Explosion-Proof Housings are Available
- One Year Warranty



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
- 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 Pushbutton:	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.

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

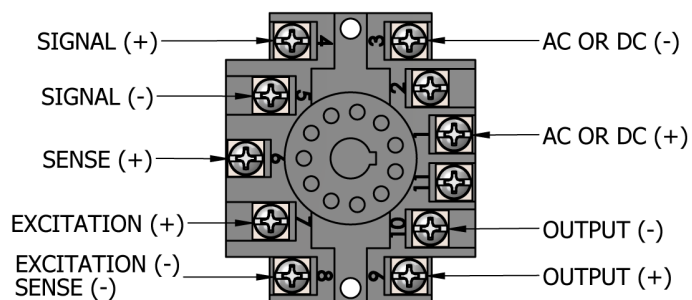
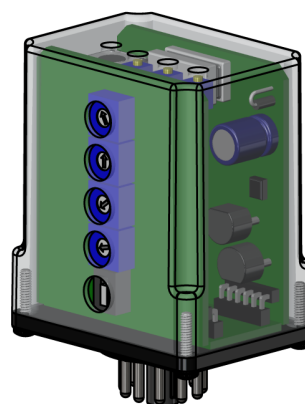
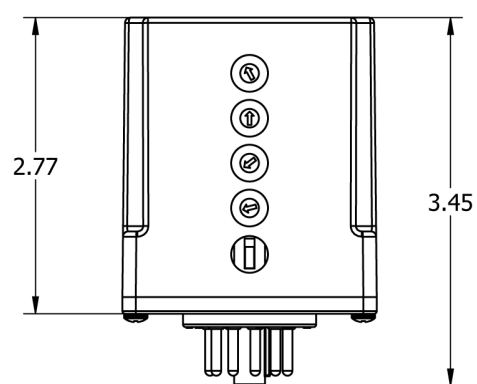
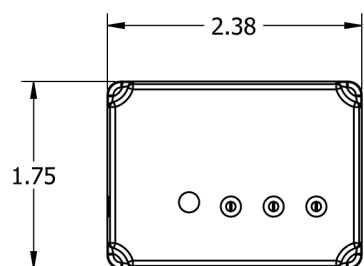
Operating Temperature Range:	-10° To +60 °C / 14° F To 140°F
Storage Temperature Range:	-20° To +70° C / -4° F To 158° F
Temperature Stability:	Better Than 0.02% of Span/°C
Humidity Range:	0 To 95% RH; Non-condensing
Enclosure Construction:	High impact polycarbonate; 11-pin plug base
Enclosure Dimensions:	2.75" high X 2.38" wide X 1.75" deep
Weight:	> 1 lbs. (0.5 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

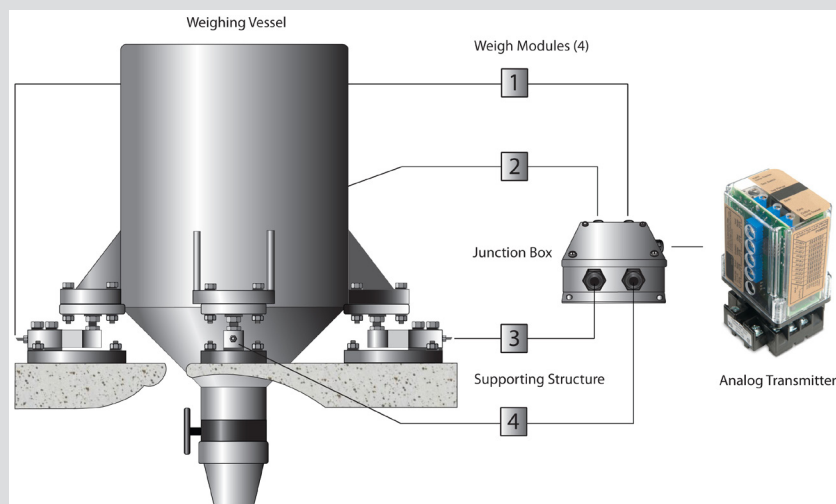
OPTIONS

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.



JA1-A001 CONNECTION SOCKET

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