



**i200 AC Conditioner with T260
Rotary Transformer Torque Sensor**

- 5 KHz carrier frequency
- Sensitivity adjustable from 0.75 to 4 mV/V full scale
- Two independent 5 VDC analog outputs
- 4-20 & 4-12-20 mA outputs, optional
- Corner frequencies of 2 & 600 Hz
- Zero velocity speed sensor output, optional

The i200 single channel conditioner-amplifier is designed for use with SensorData's line of transformer coupled rotary torque sensors. When purchased as a system, it is supplied with free in-house calibration. The i200 can be configured, as an option, to interconnect to the output of a zero velocity speed sensor installed on SensorData's rotating torque sensors. The i200 may also be used with slip ring and non-rotating, strain gage type, devices. Interconnecting cable assemblies are available from SensorData.

Specifications

(Subject to change without notice)

Sensor Interface

Type	Transformer & slip ring coupled transducers & non-rotating devices with a strain gage bridge
Number of sensors	1 per module
Bridge impedance, nominal	300 to 400 ohms
Amplifier input impedance	> 10 megohms
Excitation, strain gage bridge, nominal	2.8 VAC rms, 5 KHz
Excitation, speed sensor, nominal, optional	+5 VDC

Performance

Nonlinearity	0.02% of full scale with respect to bridge
Sensitivity, full scale	0.75 to 4 mV/V
Temperature effect on zero and span	±25 ppm/°C from 0 °C to 50 °C, otherwise ±50 ppm/°C
Output ripple & noise	0.02% for 2 Hz output & 0.03% for 600 Hz output

End User Accessible Adjustments & Controls

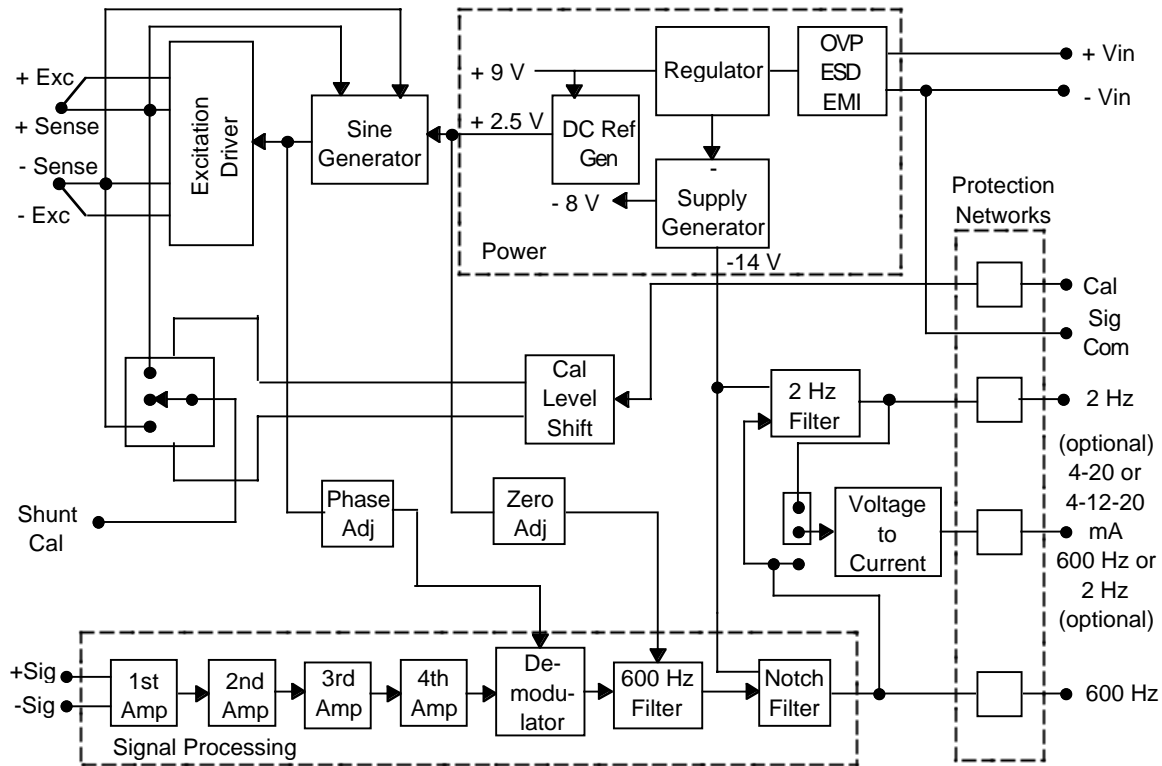
Coarse span/symmetry & zero	Internal pin connections
Fine span/symmetry & zero	Potentiometer, ±1.5% of full scale initial unbalance
Phase	Potentiometer, ±25% with respect to bridge

End User Accessible Inputs & Outputs

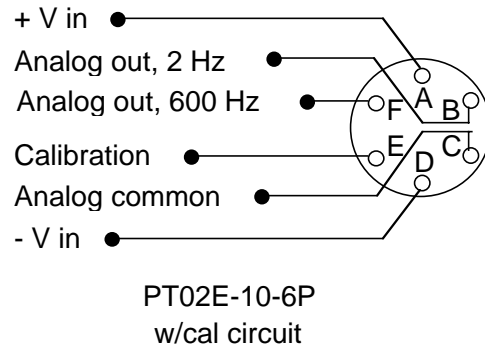
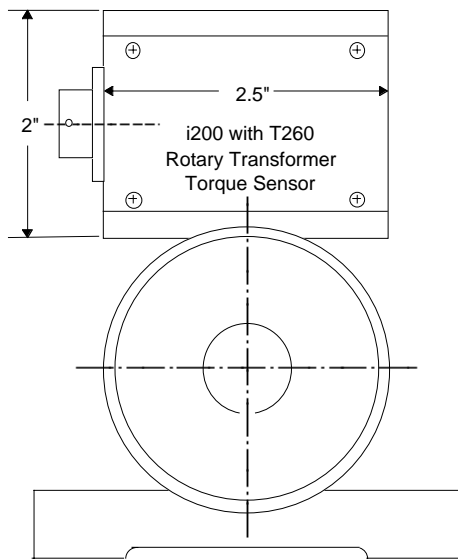
Shunt calibration	Connect +V _{in} to Cal for +value, connect -V _{in} to Cal for -value
Voltage	2 independent ±5 VDC full scale analog outputs with corner frequencies of 2 and 600 Hz
Current, optional	4-20 or 4-12-20 mA derived from 5 VDC, 2 or 600 Hz voltage source, internal pin connections
Speed sensor, optional	0-5 VDC, open collector NPN with internal 4.7 Kohm pull-up resistor

Other

Protection	Electromagnetic interference (EMI), overvoltage (OVP), electrostatic-discharge (ESD),
Protection (cont)	& short-circuit protection for all inputs and outputs with SensorData supplied sensor
Enclosure size	2.5" sq x 2" h
Enclosure construction	Steel
Power, nominal	12 to 24 VDC at 80 mA, input protected against polarity reversal
Power, noise & ripple, maximum	0.02% of full scale rms, 2 Hz output & 0.03% of full scale rms, 600 Hz output
Operating temperature	-32 °C to +85 °C



i200 Block Diagram



ORDERING INFORMATION

Consult SensorData representative in your area or the factory direct for ordering information, prices and delivery.

IMPORTANT NOTICE

Dimensions above are in inches unless otherwise noted. Manufacturer not responsible for any modification to product, fixtures, or accessories made by user or third party. User should request certified drawings before designing mountings or fixtures. Manufacturer reserves right to modify or change design, dimensions, specifications, and features of this product without prior written notice. Changes to NOTICE must be in writing and accepted by manufacturer.

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