

# SP 100

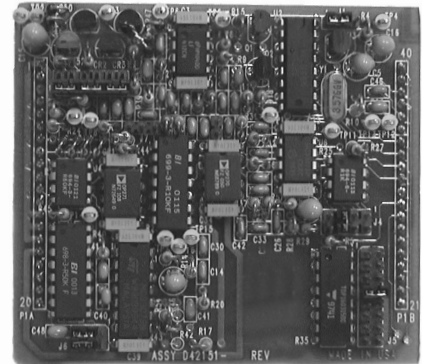
OEM Signal Processor



SENTECH INC.

The SP 100 is the lowest priced signal processor in the Fastar family. While low in cost, it provides faster response to changes in motion than either LVDTs or magnetostrictive devices. It offers high frequency response and lower temperature coefficients. It also has a unique method of compensating for changes in transducer output due to temperature variations.

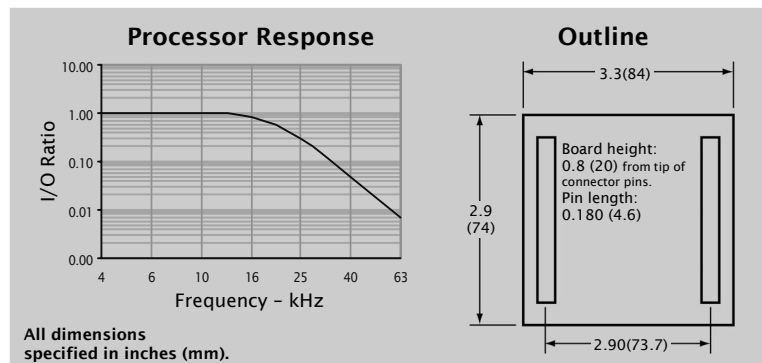
The SP 100 processor is recommended for OEM's with "in-house" printed circuit design and manufacturing capability.



## DIMENSIONS AND RESPONSE

### FEATURES & BENEFITS

- Complete signal processing for Fastar/ Hydrastar coils
- Unidirectional or bidirectional output
- Adjustable zero and span
- Easy electro-mechanical calibration
- Dynamic temperature compensation



### Technical Specifications

#### ELECTRICAL

<b>Input Power</b>	±12 VDC to ±15 VDC @80 mA, regulated
<b>Output</b>	Span: 5-20 VDC adjustable (5-16 V for HS1000) DC Offset: ±10 VDC adjustable
<b>Resolution</b>	0.02% of Full Scale
<b>Carrier Frequency</b>	112 kHz
<b>Frequency Response</b>	DC to 15 kHz, -3 dB point
<b>Response Time</b>	lags < 1°/100 Hz 30 μs delay (motion to output)
<b>Output Noise and Ripple</b>	< 0.01% of Full Range (RMS) plus 1 mV
<b>Connections</b>	Two 20-pin in-line connectors on 0.1" centers with 2.9" (73.7 mm) between rows

#### PERFORMANCE

<b>Operating Temperature Range</b>	-30°F to 140°F (-35°C to 60°C)
<b>Max Temp Coefficient</b>	Scale: ±0.02%/°F (0.04%/°C) Null: ±0.02%/°F (0.04%/°C)
<b>Warm Up</b>	15 minutes
<b>Adjustments</b>	single coil zero, span, twin coil zero, output polarity, transducer temperature compensation



Fastar and related products are protected by one or more of the following patents: U.S. 4,667,158; 4,327,350; 4,368,575; 4,912,409; 4,864,232; 4,866,378; 5,068,607; U.K. 2054954; Japan 1498268; France 8014767; 8101087. Additional U.S. and foreign patents pending.

#### WARRANTY

All Sentech Inc. products are warranted against defective materials and workmanship. This warranty applies for a period of one year from the date of delivery to the original purchaser. Any product that is found within the one year period not to meet these standards will be replaced or repaired at the discretion of Sentech Inc. No other warranty is expressed or implied. Although Sentech Inc. manufactures its products to exacting specification standards, we assume no responsibility for their misuse. Sentech Inc. accepts no liability for damages, incidental or punitive, in applications using our products. *Please note:* It is solely the user's responsibility to properly install and maintain transducers. Sentech Inc. manufactures its products to meet stringent specifications and cannot assume responsibility for those consequences arising from their misuse or unauthorized modification.

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SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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