



## SP-100

### Analog Signal Processor

*Technical Specification*

## DESCRIPTION

### General

Provides an analog signal output for use with computers, programmable controllers, chart recorders, panel meters or similar devices. The signal processor excites the scale's Weigh Bar® transducers, conditions the output and provides an accurate analog signal proportional to weight.

### Features and benefits

- **Low cost** – Eliminates expensive indicators in applications such as batching, blending, system process control or inventory which require only an accurate signal for data logging and recording
- **Multiple excitation capability** – Drives one to eight Weigh Bar transducers
- **Sense amplifier** – Insures Weigh Bar measurement accuracy by compensating for temperature-induced changes in cable resistance
- **Isolated output** – Interface via two-conductor shielded cable
- **On-board adjustments** – Coarse / fine zero, coarse / fine span and damping
- **Watertight enclosure** – Conforms to NEMA 4 standards for washdown

## SP-100 Analog Signal Processor

### SPECIFICATIONS

#### Input/Output

##### Dip-switch selectable outputs –

**Voltage**

0-1 VDC or .2-1 VDC  
 0-5 VDC or 1-5 VDC  
 0-10 VDC or 2-10 VDC

**Load**

5000 ohms per volt  
 or greater

**Current**

0-5 mA or 1-5 mA  
 0-20 mA or 4-20 mA  
 0-50 mA or 10-50 mA

**Load**

0-2400 ohms  
 0-600 ohms  
 120 ohms

**Accuracy** –  $\pm 0.1\%$  of load

**\*Power input** – 100 to 130 VAC, 48 to 62 Hz or  
 200 to 260 VAC, 48 to 62 Hz

**Signal input** – Dip-switch selectable  
 .75 mV to 30 mV (corresponds to  
 Weigh Bar outputs of .05 mV/V to 2 mV/V)

**Excitation** – 15 VDC  $\pm 0.5$  VDC

**Excitation load** – 1 to 8 350-ohm Weigh Bar transducers

**Excitation stability** – 0.01% over a range of 50° F

**Zero temperature coefficient** –  $\pm 0.20$  microvolts/°C

**Span temperature coefficient** –  $\pm 20$  PPM/°C

**Output ripple** –  $\pm 0.01\%$  F.S.

#### Operation/Dimensions

**Temperature range** – -20 to +130°F (28.9 to 54.4°C)

**Humidity** – 0 - 90%

**Dimensions** – 8"W x 10"H x 6"D steel cabinet

*\* Specify power and input when ordering*

#### Avery Weigh-Tronix - USA

1000 Armstrong Drive,  
 Fairmont, MN 56031-1439 USA  
 usinfo@awtxglobal.com  
 Toll-Free: (800) 533-0456  
 Phone: (507) 238-4461

#### Avery Weigh-Tronix - UK

Foundry Lane, Smethwick,  
 West Midlands B66 2LP UK  
 info@awtxglobal.com  
 Phone: +44 (0) 870 90 34343  
 Fax: +44 (0) 121 224 8183

Please call us or visit [www.averyweigh-tronix.com](http://www.averyweigh-tronix.com)  
 for your nearest Avery Weigh-Tronix distributor

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