



# Trig-Tek™ 368A

## Quad 4 to 20 mA Sensor Conditioner

The Trig-Tek™ 368A Sensor Conditioner is designed to accept inputs from ICP-type sensors; outputs are proportional from 4 to 20 mA.

### Key Features

- 4 channels
- 100 mV/eu input sensitivity
- 5 to 50 Full Scale (FS) engineering units (eu) (adjustable)
- 2 to 5 mA sensor Curr
- 4 to 20 mA outputs
- FS AC output
- Isolated primary power
- BNC inputs and outputs
- 20 to 36 VDC power

### Product Information

The Trig-Tek™ 368A provides an internal switch for each channel that selects the adjustable sensor “Curr” either “On” or “Off.” The 4 to 20 mA output current corresponds to 0 to 500 mV<sub>rms</sub> Full Scale (FS) engineering units (eu) with a 100 mV/eu sensor. FS is adjusted by an internal gain potentiometer for 5 to 50 FS eu. The inputs and outputs are on BNC connectors.

The 368A has a power input of 20 to 36 VDC at approximately 125 mA. The primary power has 500 V isolation from signal ground. Power is via a 3-Pin PT02A-8-3P. Connector pin A is plus power; B is return; and C is chassis ground. The mating connector is a PT06A-8-3S-SR.

10 to 18 VDC power can be supplied as an option at the time of order.

## Specifications

Note: The Astronics Test Systems policy is one of continuous development and improvement. Consequently, the equipment may vary in detail from the description and specifications in this publication.

### EU INPUT (4 each)

#### Impedance

- >100 k  $\Omega$

#### Level

- 7 V<sub>rms</sub> max

#### Sensitivity

- 100 mV/eu

#### FS eu (internal gain ADJ)

- 5 to 50 RMS eu

#### FS Level

- 0 to 1 V<sub>rms</sub>

#### Sensor Current

- 2 to 5 mA (adjustable)

#### Linearity

- $\pm 1\%$

#### Frequency Response

- 0.5 Hz to 10 kHz

#### Connector

- BNC (Low side SIG GND)

### Filter A/C (Output)

#### High Pass 12 dB/oct

- 0.3 Hz to 3 dB cutoff

#### Low Pass 24 dB/oct

- Nominal 5 kHz, 5% cutoff

Notes:

Filter cutoff frequencies must be specified at time of order or the nominal cutoff will be used.

Filters are in series with the FS and 4 to 20 mA output.

### FS AC Output

#### Impedance

- <100  $\Omega$

#### FS Level

- 0 to 500 mV<sub>rms</sub>

#### Accuracy

- $\pm 2\%$

#### Frequency Response (-5% BW Nominal)

- 0.5 Hz to 5 kHz

#### Connector

- BNC (Low side SIG GND)

### 4 to 20 RMS mA output (4 ea)

#### Current @ (Zero)

- 4.0  $\pm 0.05$  mA

#### Current @ FS

- 20.0  $\pm 0.5$  mA

#### Compliance Voltage

- 12 V

#### Shunt Resistance

- 300  $\Omega$  max

#### Load Resistance

- 300  $\Omega$  max

#### Accuracy

- $\pm 2\%$

#### Time Constance

- 2 s

#### Connector

- BNC (low side 100  $\Omega$  current shunt)

### Interface

#### Power

- 20 to 36 VDC @ >150 mA

### Mechanical

#### Dimensions

- 5.25" L x 3.25" W x 2.25" D  
(13.3 cm x 8.3 cm x 5.7 cm)

## Ordering Information

408314-001 : Trig-Tek™ 368A (Mature)

Sensor Conditioner

