



Input: 0-30 mV to 0-1000V, 0-20 μ A to 0-100 mA
Output: 0-20 mA to \pm 20 mA, 20-4 mA, 0-10 V to \pm 10 V, 10-0 V, Optional Alarm

Field Programmable with PC Programming Kit

- Single Channel with Optional Alarm Contact
- Plug-In Connectors Simplify Installation
- Isolate and Amplify Unipolar or Bipolar Signals
- Custom 57 Point Input Linearization

Applications

- Isolate, Convert, Boost, Rescale Process Signals
- One Model Programmable for Many Applications
- Non-Linear Input Signals

Specifications

Input Ranges

Field or factory configurable via PC programming software and cables. Ranges include standard process signals such as 4-20 mA, 1-5 V, etc. Any point within stated ranges may be zero (i.e. -1 to 4 V) Input may be linearized to 57 points Minimum span = 0.1 x highest input value quantity

Voltage: Any range from -1.7 VDC to +1.7 VDC, 1 M Ω impedance
 Any range from \pm 1.7 VDC to \pm 100 VDC, 540 K Ω impedance
 Any range from \pm 100 VDC to \pm 1000 VDC, 5.5 M Ω impedance

Current: Any range from -100 mADC to +100 mADC, 15.4 Ω
 Versions with \pm 1.5 mADC, 1k Ω input are available

Output Ranges

Field or factory configurable via PC programming software and cables. Ranges include standard process signals such as 4-20 mA, 1-5 V, etc.

Voltage: Any range from -10 VDC to +10 VDC
 Reverse output capable (i.e. 10-0 VDC)

Current: Any range from -20 mADC to +20 mADC
 Reverse output capable (i.e. 20-4 mA)

Burden

12 V for current, see data sheet for voltage

Alarm (optional)

SPDT 2 A @ 250 VAC (500 VA) or 125 VDC resistive (60 W)
 Programmable: Inactive, High, Low, hysteresis, delay

Output Linearity and Repeatability

Better than \pm 0.2% of maximum span

Output Ripple and Noise

Less than 0.5%p-p of output value

Response Time

100 milliseconds typical
 Programmable input filter

Isolation

2300 V_{RMS} minimum
 Full isolation: power to input, power to output, input to output

Ambient Temperature Range

Operation: -25 to 55 $^{\circ}$ C
 Storage: -40 to 70 $^{\circ}$ C

Temperature Stability

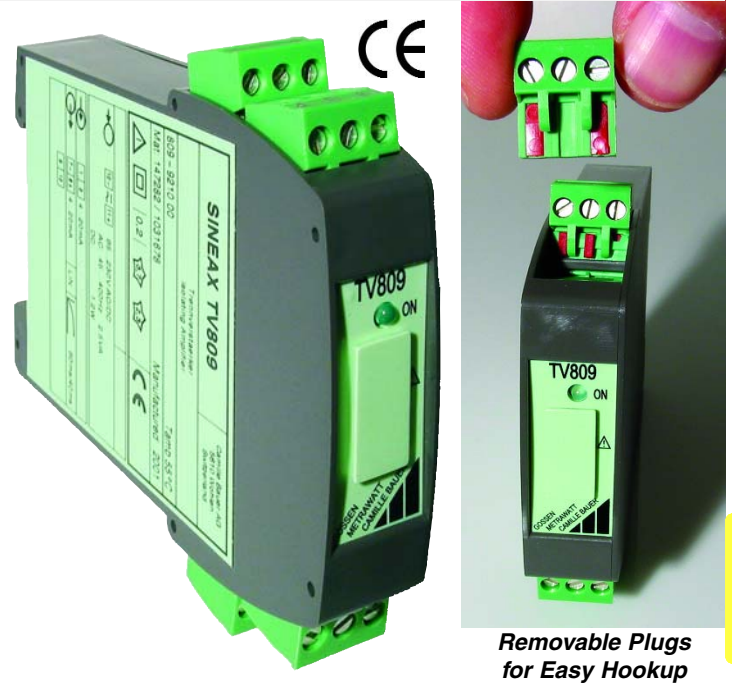
Better than \pm 0.01% of maximum span per $^{\circ}$ C

Case Material

Lexan 940 polycarbonate, gray UL #94V-0 housing

Power

24-60 VAC/VDC or 85-230 VAC/VDC depending on model



Removable Plugs for Easy Hookup

Description and Features

The TV 809 isolating amplifier electrically isolates input and output signals, and is able to amplify and/or change the signal level, linearity, or type (current or voltage) of the input signals.

Measured variables and measuring ranges are programmed with the aid of a PC, a programming cable, and the programming software. The TV 809 can be factory programmed, or the programming kit may be purchased separately. Specific measured variable data such as analog output signal, transmission characteristics and various functions in combination with the alarm function can also be programmed. The TV 809 is capable of custom input linearization with up to 57 points for greater accuracy.

The removable connectors, standard DIN rail mount, and front-mount programming connector allow for easy installation and setup.

Models & Options

Model	Alarm	Power Supply
809-91100	no	24-60 VAC/VDC
809-92100	no	85-230 VAC/VDC
809-91110	yes	24-60 VAC/VDC
809-92110	yes	85-230 VAC/VDC

See www.apicb.com for complete specifications or consult factory.

Accessories—Order as separate line item

- PRKAB 600-B Programming cables and TV 800 Plus software
- API TK36 DIN rail, 35 mm W x 39" L, aluminum

