

Programmable Signal Generator

FEATURES

- Portable and Compact
- Sealed keypad - Dirt and Moisture Proof
- LCD display - User friendly prompts
- Generates analog and pulse signal types for system checkout
- Instruction label on back of PSG for connections and use.
- Ballistic Nylon Carrying Pouch

APPLICATIONS

- Bench testing
- Field Testing
- Troubleshooting
- Training



PRODUCT DESCRIPTION

The PSG is a hand held programmable signal generator designed to simulate analog or pulse signals from controllers, sensors, and other building automation system components. It is designed as an aid to speed up the process of system setup and calibration. PSG is equipped with a removable cable with alligator clips for power and signal attachment. User friendly prompts on the LCD screen and a membrane switch keypad allow the user to set the output values.

The analog signal can be within the range of 0 to 10 volts or 0 to 20mA. The analog output can be programmed to deliver an absolute value or a minimum/maximum toggle output. Absolute: Enter a value, and PSG will output it.

MIN/MAX Toggle: Enter a minimum value and a maximum value and toggle between the two, the minimum and maximum being adjustable as it is working.

The pulse output is capable of delivering an Absolute, Looping, or Duty Cycle type pulse.

Absolute: Enter a time, and PSG outputs it. The pulse duration can be entered in seconds, minutes, or hours.

Looping: Enter an ON time and an OFF time and it will continue to pulse until stopped.

Duty Cycle: Signal sent as a percentage of ON time and OFF time (from 0-100%) of a selected pulse period. This signal can be an absolute percentage, or minimum/maximum toggle between the two percentages.

ORDERING INFORMATION

Specify: **PSG**

SPECIFICATIONS

Electrical Requirements

Power Supply

Supply Voltage	24 VAC or VDC (+/- 10%).
Maximum Current	150 mA (rms)
Fuse	Internal, 5 x 20 mm, 250V, Fast Acting ACT# FS018 - 1ea. 0.025 amps, 250V, FA (LittleFuse 235.250 or Bussman GMA-250mA)

Analog Output (Current Mode)

Current Span	0-20 mA
Resolution	8 bit, 255 steps

Maximum Load	500 ohms
Accuracy	+/- .2mA of entered output value
<i>Analog Output (Voltage Mode)</i>	
Voltage Span	0 to 10 VDC
Resolution	8 bit, 255 steps
Minimum Load	500 ohms
Accuracy	+/- 0.1 volt of entered output value
<i>Pulse Output</i>	
Minimum Pulse Width	1 milliseconds
Maximum Pulse Width	999.99 hours
Limits	0.01 to 999.99 in second, minutes, or hours
Fuse	Internal, 5 x 20 mm, 250V, Fast Acting ACT# FS017 - 1ea. 0.1 amps, 250V , FA (LittleFuse 235.100 or Bussman GMA-100MA)
AC Pulse	
Wet	Triac switched 24 VAC from supply voltage (AC power required)
Dry	Triac switched external 9 to 24 VAC source
DC Pulse	
Wet	Transistor switched 24 VDC from supply circuit
Dry	Transistor switched external 5 to 30 VDC source
Minimum Load	750 ohms
<i>Display</i>	
Type	LCD, 2 rows of 16 characters
Contrast Adjustment	On left side of PSG (small screwdriver slot)
Mechanical Requirements	
<i>Connections</i>	
Custom Cable Assembly	With miniature alligator clips for all connections including power supply positive and negative, analog signal, wet and dry pulse connections and analog/wet pulse signal common
Dimensions	2.125" H x 4.01" W x 7.50" L
Weight	15 oz. (PSG, cable and ballistic nylon carrying pouch)
<i>Environmental Requirements</i>	
Operating Temperature	32 to 120 deg F.
Storage Temperature	-20 to 150 deg F.
Operating Humidity	5 to 95% non-condensing @ 70 deg. C.

Specifications may change without notice to improve product performance.