



SPECIALTY DEVICES

## P-1 PULSER PULSE GENERATOR

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### DESCRIPTION

The P-1 Pulser is a handy pulse generator designed to provide a Form C (KYZ) output to telemetry, recorders, energy management systems or similar devices to simulate the electric meter's KYZ pulse output. In this way, the user or technician can determine that the pulse receiving device or system is detecting the pulses correctly. Either a Form A (KY) output using 2 wires or a Form C (KYZ) using all three wires can be simulated from the P-1. The P-1 Pulser has three sources of pulses selectable: 1Hz precision pulse, a variable 1Hz to 10Hz pulse or an external pulse input for use with a function or signal generator.



The P-1 operates over the standard SSI wide low-voltage range. The power supply may be from 6 to 35VDC or from 6 to 24VAC. The unit includes a 12VAC plug-in "Wall Wart" power supply for easy connection to a 120VAC source.

The P-1's output is configured as an optically--isolated, dry-contact, solid state output with a 100mA maximum current rating similar to the contact rating of all electric meters. Further, it contains built-in MOV transient protection for the solid-state relay contacts which eliminates the need for external or off-the-board transient suppressors. The output terminals are Red, Yellow and Black banana jacks, the standard code for KYZ outputs.

The P-1's external pulse input is dry-contact compatible making it current limited and easy to use with a variety of function generators or signal generators. The P-1 Pulser's external input is designed for high-speed pulses and can switch up to 72,000 pulses/hour.

Bright RED and GREEN LED indicators, display the K-Y or K-Z continuity status at all times thus allowing a rapid check of the pulser's performance without requiring any additional test equipment.

The P-1's enclosure is made of NORYL plastic and offers superior wear and electrical insulation between the circuits and the mounting surface.

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## SPECIFICATIONS

### ELECTRICAL

Power Input:	6 to 35 VDC or 6-24VAC. Burden: 10 mA 120 VAC input with 12VAC Wall Wart Power Supply included with P-1
Pulse Input Modes:	1 Hz Continuous precision reference 1Hz to 10 Hz Variable External Input from Pulse Generator - One Form A input dry-contact compatible input. "Kin" is (-) common return. "Yin" is + positive input pulse signal.
Outputs:	One set of dry Form C contacts (K, Y & Z) for energy pulses. The contacts are rated at 125VAC/VDC at 100milliamps. The maximum rating of the contacts is 800mW. The output is factory fused at 1/10 amp. (3AG)
Contact On-State Resistance:	25 ohms maximum, 18 typical
Operate and Release Time:	Turn On Time - .5 mS typical; 3 mS MAX Turn Off Time - .1 mS typical; 1 mS MAX
Input/Output Isolation Voltage:	3750Vrms

### MECHANICAL

Mounting:	Any position
Size:	4.0" wide, 4.0" high, 2.25" deep
Weight:	< 1 lb

### TEMPERATURE

Temperature Range:	-38° C to +70° C, -38.4° F to +158° F
Humidity:	0 to 98% non-condensing

### AVAILABLE OPTIONS

Input Voltages:	Contact factory for other input voltages and special orders.
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