PP400

Stationary Generator Monitoring System

The PP400 generator monitoring system is a comprehensive solution for monitoring all of the major alarm points for any indoor or outdoor standby generator application. This monitor includes a power harness, custom I/O harness, has seven (7) additional programmable bias inputs and three (3) ADC inputs. The PP400 digital inputs are used with generator controller outputs and accessory kits. When configured with the appropriate accessory kits, the PP400 can log the full sequence of operation of the emergency power system.

Standard Unit Includes

- **PP400** Monitor – Fully Configured & Scripted
- External Cellular & GPS Antenna
- Power Harness and Custom I/O Connection Harness
- Internal 1Ah Lithium Ion Backup Battery
- 7 Digital Inputs
- 3 ADC Inputs
- 5 Relay Driver Outputs
- 7-32VDC Power
- Cellular Carrier Activation
- Over-The-Air Unit Configuration and Updates
- Generator On (Running)/Off (Stopped)
- Engine Battery Voltage Monitor with Low Battery Alarm
- Generator Failed to Exercise (Missed Exercise Cycle)
- Extended Run Time Alerts - Generator Running for 4, 8, 12 & 24 Hours
- Optional Remote Start/Stop Relay Driver Output

Input Configuration

The **PP Series** of monitoring systems are **UNIVERSAL** to all brands, models, ages, and sizes and provide extensive flexibility when selecting what conditions to monitor. Typically, there are relay outputs available on the generator, some may even be programmable. The **PP Series** of monitoring systems allow you to cost effectively utilize available output contacts on the generator to monitor critical alarms and conditions.

All **PP Series** monitoring systems include a “Generator On/Off” engine run signal and a battery voltage monitor with low battery alarm. The **PP Series** monitors also log the exercise cycle, send an alert if the generator has “Failed to Exercise,” and provide an alert if the generator has been running for an extended period of time.

The **PP400** monitoring system includes **seven (7)** additional digital inputs that can be used to monitor any condition that is available from the generator outputs or from any of the optional accessory kits.

Power Link

Power Link is our web based user interface that is available on any computer or mobile device. Power Link logs the time and date of every event sent from the monitor and provides alerts that can be sent via email and/or text to an unlimited number of recipients. Our customers can also receive a personal login account as well as receive a monthly generator activity report.

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Digital Inputs *(7 Available)*

The monitor programming is completely configurable and based on the inputs selected. When utilizing available output contacts on the generator, the monitoring system is able to be configured for those alarms and conditions. There are also optional accessory kits available that can be used to sense the availability of **Utility Power Voltage** (Utility Power On/Off), **Generator Output Voltage** (Generator Breaker Open/Closed) and **Generator Current** (On Generator Power).

The **PP400** digital inputs are programmable with a high or low bias and can be used with any output contact available on the generator controller.

Utility Voltage Sensing Kit

Two types of kits are offered for Utility Voltage Sensing to log and report the events of "Utility Power On/Off." The PTK-UVD kit is a voltage detection sensor suitable for any AC voltage and connects on to a conductor to determine if AC voltage is present or not. The PTK-UVR kits include an AC voltage sensing relay and connection harness and come in voltage configurations of 120V, 208V, 240V, and 277V.

Generator Voltage Sensing Kit

The PTK-GVD kit is a voltage detection sensor suitable for any AC voltage and connects on to an output conductor on the output side of the generator breaker to determine if AC voltage is present or not when the generator is running. This kit is used to log and report the event of "Generator Breaker Open." When used in conjunction with a Utility Voltage Sensing Kit, the condition of "Site Without Power" is reported when no voltage is present from either the Utility Source or Generator

Generator Current Sensing Kit

The PTK-GCS kit includes a split core current sensing switch that clamps around one of the generator output conductors or a stator lead to determine if current is present from the generator. This kit is used to log and report the conditions of "On Generator Power" and "On Utility Power.

ADC Inputs *(3 Available)*

The **PP400** has three (3) ADC inputs available for a variety of uses. ADC inputs are typically used for detecting a generator fault alarm when connected to an alarm horn or fault lamp when a common fault alarm output is not available or used with an external fuel level sensor when a low fuel level output contact is not available.

PP400 Specifications

External Cellular & GPS Antenna

Custom Plug In 48" I/O Wiring Harness with Separate 96" Power Harness

Temperature: -30° to 75° C (operating)

Humidity: 95%RH @ 50° C non-condensing

Shock and Vibration: U.S. Military Standards 202G and 810F, SAE J1455

EMC/EMI: SAE J1113

Operating Voltage: 7-32 VDC

Dimensions: 4.3 x 3.2 x 0.86", (110 x 81 x 22mm)

Weight: 4 oz, (113 g)

Comprehensive I/O:

- Digital Inputs: 7 programmable bias
- Digital Outputs: 3 open collector (150 mA)
- Analog Inputs: 3 external ADC and 1 internal VCC monitor (battery voltage monitor)

Status LEDs: GPS and cellular

Mount: Screw Mounting Bracket, Tie-Wrap, Velcro or Adhesive

PENN REMOTE MONITORING
Power Generation Monitoring Services

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