POWER ZONE® CONTROL PLATFORM
Power Zone® Pro Controller and Gateway

Features - Power Zone® Pro Controller

The Generac Power Zone® Digital Control Platform is a fully integrated and multipurpose family of controllers for Generac's generator systems.

Standard Single Unit Control Features*
- Engine Protective Functions
- Alternator Protective Functions
- Digital Engine Governor Control
- Digital Voltage Regulator
- 4.3" Color Touch Screen
- Multi-Lingual
- Multiple Programmable Inputs and Outputs
- Remote Display Capability
- Remote Communication via Modbus® RTU, Modbus TCP/IP, Ethernet 10/100, SNMP
- Alarm and Event Logging with Real Time Stamping
- Expandable Analog and Digital Inputs and Outputs
- Wireless Software Update via Remote Computer
- BMS and Remote Telemetry
- E-mail Notifications for Alarm Conditions and Log Data**

Standard System Control Features
- Built-In PLC Logic Eliminates the Need for External Controllers Under Most Conditions
- Programmable I/O Channel Properties
- Built-In Diagnostics

Qualification Testing
- Life Test in Environmental Chamber
- Temperature Rating -40° C to +60° C
- Vibration Tested and Protected

Voltage Regulation (Single or Three Phase Module Options)
- Digital Control
- Single Phase or Three Phase RMS Sensing with Loss of Sensing Protection†
- Variable V/F Slope Settings and Adjustable Gains
- Negative Power Limit
- Soft Start Ramping
- Components Encapsulated for Total Protection
- Fault Protection (I^2T Function and GFI)‡

PLC (Built-In Programmable Logic Controller)
- Configurable Through Software Tool
- Customer Configurable for Non-Standard Options
- Up to 8 Simultaneously Running PLC Programs or in Sequence

Communication Ports
- 1 - RS-485 - Power Zone Gateway
- 1 - RS-485 - Remote Annunciator Panel/Remote Relay Panel
- 2 - CANBus - Power Zone® Accessories

* For SG and SD Models
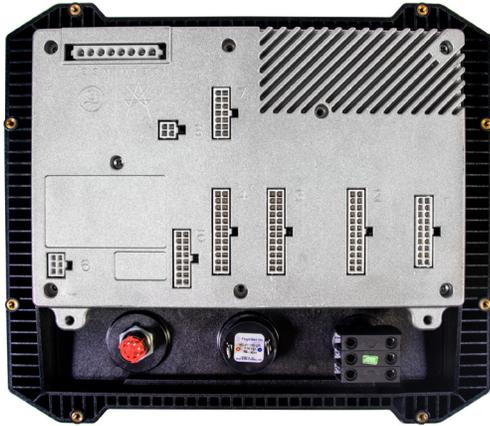** Requires Use of a Network Accessible Authenticated or Open SMTP Server

† With Select Voltage Regulators
‡ Configurable Option

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Features - Power Zone® Pro Controller (Continued)

Display (Touch Screen)
- LCD 4.3" Color Touch Screen
- Easy Identifiable Icons
- Multi-Lingual
- IP65 Rated
- On Screen Editable Parameters
- Key Function Monitoring
  - Three Phase Voltage, Amperage, kW, kVa, and kVAr
  - Selectable Line to Line or Line to Neutral Measurements
  - Frequency
  - RPM
  - Engine Coolant Temperature
  - Engine Oil Pressure
  - Engine Oil Temperature
  - Battery Voltage
  - Warning and Alarm Indication
  - Diagnostics
  - Maintenance Events/Information
  - Hourmeter

Codes and Standards
- UL 6200
- UL 2200
- CSA STD C22.2 No. 14
- IEC/EN 61010-1
- NFPA 110 (Software Programmable for Level 1 or 2)§

Connections§§
- 21 - Digital Outputs (Open Drain, 35VDC, 1.7A)
  - 7 Fast PWM Capable
  - 1 High Current
- 15 - Digital Inputs Maximum
  - 7 Fast PWM Capable
- 12 - General Purpose Analog Inputs
- 2 - Special Purpose Analog Inputs
- 2 - Analog Outputs (0-10 VDC)
- 1 - E-Stop Relay Output
- 3 - Current Sense Inputs
- 8 - High Voltage Sense Inputs (Three Phase + Neutral)
- 1 - Magnetic Pickup Input
- 1 - Coolant Sensor Input
- 2 - CANBus Channels
- 1 - External RS-485 Port
- 2 - Switchable 12VDC Power Outputs

Protections
- High/Low Oil Pressure
- High/Low Coolant Level
- High/Low Coolant Temperature
- Sender/Sensor Failure
- High/Low Oil Temperature
- Over/Under Speed
- Over/Under Voltage
- Over/Under Frequency
- Over Current
- Over Total kW
- High/Low Battery Voltage
- Battery Charger Current
- Phase to Phase and Phase to Neutral Short Circuits (I^2T Algorithm and GFI)

Control Panel and Touch Screen
- Auto/Off/Manual
  - Operation Through Key Switch
  - Indication Through Touch Screen
- Alarm Acknowledge Soft Key
- Audible Alarm and Silence
- Emergency Stop
- Not in Auto Indication Through Touch Screen

§ With Additional Optional Remote Annunciator
§§ Actual I/O May Vary Due to Configuration

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POWER ZONE® CONTROL PLATFORM
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Features - Power Zone® Gateway

The Power Zone® Connectivity Gateway is a user interface for the Power Zone® system that provides external communication via ethernet to a connected device such as a computer, smart phone or tablet. This external communication allows the user to configure or monitor generator parameters, including building management system connections.

Communications
- 1 - Ethernet Port
- 1 - RS-485 Port - Input to Main Controller
- 1 - RS-485 Port - Building Management
- 2 - Type A USB Port

Power Supply Requirements
- Voltage: 11-13 VDC (12 VDC Nominal)
- Usage: 1.1A (Maximum During Power Up)
- Cable: 2 Wires

Environmental
- Temperature Rating -40°C to +60°C
- UL Type 1 Enclosure
- 5% to 90% Non-condensing Humidity

Codes and Standards
- UL 6200
- CSA STD 222 No. 61010-1
- C-ETL-US
- IEC/EN 61010-1

Features◊
- Auto/Off/Manual Indication
- Not in Auto Indication
- Alarm Acknowledge Button
- 2 LED - Power & Communication
- Easily Identifiable Icons
- Multi-Lingual
- On Screen Editable Parameters
- USB Port for Easy Log Data Downloads and Firmware Updates
- SNMP 3 with Traps
- Modbus Passthrough
- Key Function Monitoring
  - Three Phase Voltage, Amperage, kW, kVA, and kVAr
  - Selectable Line to Line or Line to Neutral Voltage Measurements
  - Voltage Frequency
  - Engine Speed
  - Engine Coolant Temperature
  - Engine Oil Pressure
  - Engine Oil Temperature
  - Battery Voltage
  - Warning and Alarm Indication
  - Diagnostics
  - Maintenance Events and Information
  - Engine Hour Meter

◊ When Viewing on a Connected Computer, Smart Phone, Tablet, or Other Smart Device