



SAVANT

60 Amp Power Module with Current Transformer (Supports 1-Inch On-Center Load Centers) Quick Reference and Installation Guide

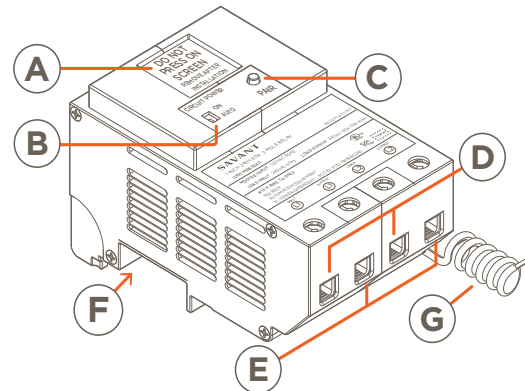
Box Contents

- (1) 240VAC (2 Pole) Power Module
 - GPM-H1R60240-21 w/Pigtail
- (1) Product Information and Regulatory Insert (009-1950)
- (1) Quick Reference and Installation Guide (this document)

Specifications

Environmental				
Temperature	32° to 104° F (0° to 40° C)			
Humidity	5% to 85% Relative Humidity (non-condensing)			
Location	Indoor Use Only			
Dimensions and Weights (net)				
	Length	Width	Height	Weight
Module	4.96 inch (12.6 cm)	2.98 inch (7.57 cm)	2.80 inch (7.11 cm)	1.0 lbs (.45 kg)
Shipping	7.32 inch (18.6 cm)	6.18 inch (15.7 cm)	3.15 inch (8.00 cm)	1.25 lbs. (.57 kg)
Power				
Input Power (powers the module)	120V AC (+/- 10%) @ 60Hz, 0.1A (max)			
Input Power (from feeder breaker)	240V AC @ max load power			
Load Power	14400VA max (240V AC 60A resistive load / 3HP max)			
Features of Automatic Action	Type 1.B action			
Standards				
Wireless	Bluetooth Low Energy (BLE) - 2.4 GHz radio frequency			
Regulatory				
Safety and Emissions	FCC Part 15	UL	ICES 003	
				
Contains FCC ID:	PUU-QP1R60240			
Contains IC:	10798A-QP1R60240			
RoHS	Compliant			
Recommended Load Center Types				
Refer to the Features section to the right for compatibility.				
Supported Load Types				
Standard Configuration	Relay On/Off type loads (home automation)			
Electrical and Safety Characteristics				
Screw Tighten Torque	5.0 Nm			
Wire Type	Copper (Cu) only			
Pollution Degree	2			
Purpose of Control	Operating Control, Smart Relay Control Module or the equivalent			
Software	Class A			
Impulse Voltage	2500V			
Construction of Control				
Open Type	Independently mounted for flush mounting			
Minimum Supported Release				
Savant OS	da Vinci 10.2			

Descriptions



A multi-Page LCD screen that can display:

- Power draw at the output.
- Firmware, Mac Address, and Regulatory Info.
- UID of the Host that the module is communicating with.
- Real-time Bluetooth status connectivity icon.

A

B Manual Load Switch - Toggle to the ON position to switch the load on. Toggle to AUTO for normal operation.

B

PAIR Button - The PAIR button is a multi-use button. The duration that the button is pressed and held determines the function that gets initiated:

C

Press and Release - Cycles through the various LCD screens. (POWER > INFO 1 > INFO 2).

Press and hold - Press and hold for 2 seconds to put module into pairing mode. Press and hold for 5 seconds to reset.

D

Input Power Connections - Connect outputs from a 2-pole breaker to inputs L1 and L2. See the **Wiring** section below.

E

Output Power Connections - Connect a 240V AC load across outputs L1 and L2. See the **Wiring** section below.

F

120V AC Connection - Plugs into the 120V AC bus bar in the electrical panel. The voltage from this connection powers the module.

G

Pigtail Neutral - Wire the neutral wire that protrudes from the module's rear to the neutral bar in the breaker panel.

Features

- Control capability for loads up to 14400VA (volt-ampere).
- The GPM-H1R60240-21 60 Amp Power Module is compatible with Schneider Homeline, Eaton BR, Siemens, and GE Powermark Gold load centers with a one-inch on-center bus bar.
- Dynamic management of loads.
- Built-in energy monitoring; +/- .5% revenue grade accuracy / 1 sec sample time.
- Communicates over the air using Bluetooth Low Energy (BLE) technology.
- Manual load switch positioned on the front panel can toggle power to the output On and Off.
- Color LCD display for easy identification and load status.

Important Information

- A GPM-H1R60240 module can switch up to a 60 amp load.
- The breaker feeding the power module should be at most 60 amps.
- To determine the number of spaces in the electrical panel needed, add the spaces required for the 2-pole feeder breaker to the spaces needed for each power module.
 - Each 2-pole feeder breaker requires two spaces.
 - Each GPM-H1R60240-21 module requires three spaces.
- Savant recommends not connecting any mission critical loads such as medical devices to this module.

ELECTRIC SHOCK! The 120/240V AC, 60 Hz source poses an electrical shock hazard that has the potential to cause serious injury to installers and end users.

CAUTION! Risk of Electric Shock - More than one disconnect switch may be required to de-energize the device before servicing.

IMPORTANT! A licensed electrician is required to install any of Savant's Relay Modules.

Branch Circuit Minimum Size of Conductors (General circuit wiring, Copper Conductors)

15A	20A	30A	40A	50A	60A
#14 AWG	#12 AWG	#10 AWG	#8 AWG	#6 AWG	#4 AWG

NOTE: This wiring requirement was based on the National Electric Code (NEC) (ANSI/NFPA70), Canadian Electric Code, Part 1 (CEC), and local codes Minimum Size of Conductors.

Installation into Electrical Panel

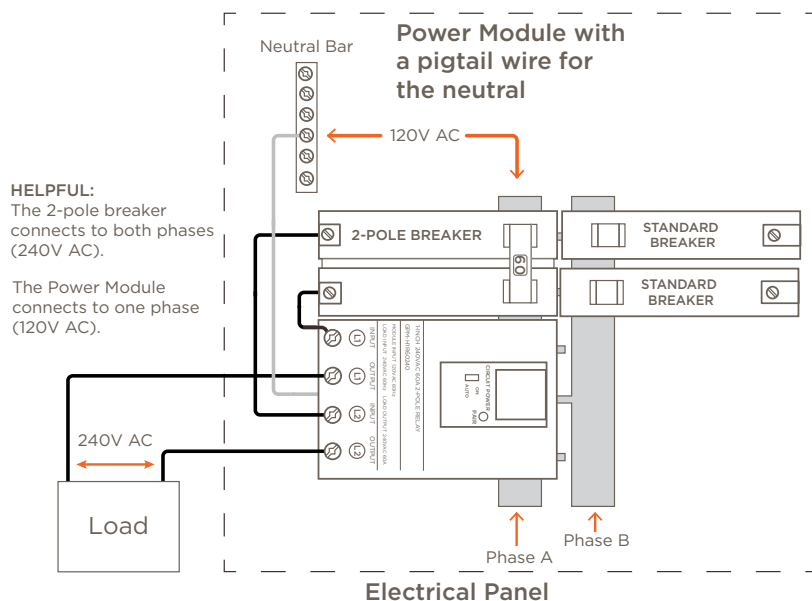
1. Remove power from the electrical panel by switching off the panel's main breaker.
2. Position and install a 2-pole breaker into any two adjacent slots in the electrical panel. Press firmly until the breaker is fully seated onto the appropriate bus bars.
3. Position and install the 60 Amp Power Module into any three consecutive empty slots in the electrical panel. Press firmly until the module is fully seated onto the appropriate bus bar. This module can be plugged anywhere there are three consecutive open slots but is typically installed alongside the breaker installed in step 2.

HELPFUL! The GPM-H1R60240 60 Amp Power Module fills three slots in the breaker panel but connects to only one phase (120V AC). This 120V AC connection supplies the voltage needed to power the module.

4. Use the diagram below for reference when making the connections.

Wiring

The diagram below shows the wiring for a GPM-H1R60240-21 power module. The neutral wire is a pigtail type wire protruding from the rear of the module.



Circuit Test Instructions

Use the instructions below to test the modules. The setup requires:

- 60 Amp power module.
- Load with maximum amperage of 60A.
- Standard 2-pole, 60 amp circuit breaker plugged into an electrical panel.
- 60 Amp Power Module plugged into an electrical panel.
- 120/240V AC source

⚠ IMPORTANT!

- The GPM-H1R60240-21 module can accept up to a #4 AWG wire. See the **Branch Circuit Minimum Size of Conductors** table on the previous page.
- In a 2-phase system, a 2-pole breaker connects across two phases in an electrical panel to supply roughly 240V AC to INPUTS L1 and L2 on the power module. In 3-phase systems, the 2-pole breaker supplies about 208V AC.
- The power module plugs into only one phase of an electrical panel to supply the 120V AC needed to power the module.

1. Plug the 240V AC 2-pole power module and 60 amp 2-pole feeder breaker into the electrical panel.

2. Connect the output from one breaker of the 2-pole breaker combination to INPUT L1 on the module.

3. Connect the output from the remaining side of the 2-pole breaker to INPUT L2 on the module.

4. Connect one side of a load to OUTPUT L1 on the power module.

5. Connect the remaining side of the load to OUTPUT L2 on the power module.

6. Connect the neutral wire from the power module to the neutral bar.

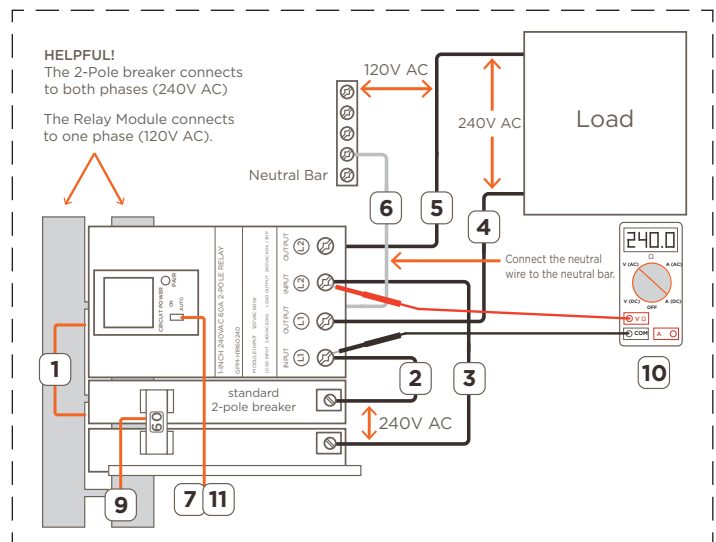
7. Verify the circuit power switch on the power module is in the AUTO position.

8. Apply power to the electrical panel (not shown in diagram).

9. Toggle the 2-pole 60 Amp breaker to On

10. With a voltage tester or similar, verify that roughly 240V AC is measured between INPUT L1 and INPUT L2 on the power module. In a three phase system, measure 208V AC.

11. To test, toggle the CIRCUIT POWER switch to the ON position and observe the load switches On. Toggle the CIRCUIT POWER switch to AUTO and verify the load switches Off.



Additional Documentation

Further information is available in the documents listed below and can be accessed via the [Savant Customer Community](#).

- Panel Bridge Controller - PoE (PBC-P1000) - QRG
- Savant Panelized Lighting Deployment Guide.
- Savant Power System Deployment Guide - Power & Light App
- Savant Power LVL 2 EV Charger Deployment Guide

