# SAVANT

## Dual 24V DC Control Relay Companion Module (Supports QO Style Load Centers) Quick Reference and Installation Guide

#### **Box Contents**

- (1) Dual 24V DC Control Relay Companion Module
- GPM-QP2PWL-20 QO™ w/Plug-on Neutral
- (1) Product Information and Regulatory Insert (009-1950)
- (1) Quick Reference and Installation Guide (this document)

## **Specifications**

32° to 104	° F (0° to	o 40° C)					
5% to 85%	5% to 85% Relative Humidity (non-condensing)						
Indoor Use	Indoor Use Only						
Weights							
th Wid	th	Height	Weight				
		2.60 in. (6.61 cm)	.5 lbs (.23 kg)				
		1.71 in. (4.34 cm)	1.0 lbs. (.45 kg)				
nput Power (powers the module) 120V AC (+/- 10%) @ 60 Hz, 0.1A max							
	C / 10A n	nax					
24V D0	C / 10A t	otal (max)					
	(The 10 amps can be on one output or split between the two.)						
Type 1.1	Type 1.B action						
Bluetooth	5 Low E	nergy (BLE)					
- 2.4 GHz	z radio fr	requency					
FCC Part	15	UL	ICES 003				
FC							
2AA9B10							
12208A-10	12208A-10						
Compliant	Compliant						
Load Cente	er Type	S					
<mark>es</mark> section to	the righ	t for compati	bility.				
d Types							
24V DC OI	24V DC On/Off type loads						
cteristics							
3.0 Nm							
Copper (C	Copper (Cu) only						
	2						
2							
2 Operating	Control						
	5% to 85%           Indoor Use           d Weights           ith         Wid           in.         1.48           3 cm)         (3.76           in.         4.30           5 cm)         (10.5           in.         4.30           5 cm)         (10.5           ia         24V DO           (The 10           betwee           Type 1.           Bluetooth           -         2.4 GH:           FCC Part           E           2AA9B10           12208A-10           Compliant           Load Center           res section to           d Types           24V DC O           a.3.0 Nm	5% to 85% Relative Indoor Use Only d Weights th Width in. 1.48 in. 3 cm) (3.76 cm) in. 4.30 in. 5 cm) (10.92 cm) (10.92 cm) (10.92 cm) 24V DC / 10A tr (The 10 amps c between the tw Type 1.B action Bluetooth 5 Low Er - 2.4 GHz radio fr ECC Part 15 FCC 2AA9B10 12208A-10 Compliant Load Center Type res section to the righ d Types 24V DC On/Off typ acteristics 3.0 Nm Copper (Cu) only	Indoor Use Only  Weights  Ith Width Height  In. 1.48 in. 2.60 in. Iscm) (3.76 cm) (6.61 cm) In. 4.30 in. 1.71 in. Complexity of the second sec				

#### Descriptions



	Multi-Page LCD screen that can display the following:
	- Firmware, Mac Address, and Regulatory Info.
$(\mathbf{A})$	- UID of the Host that the module is communicating with.
$\bigcirc$	<ul> <li>Real-time Bluetooth status connectivity icon.</li> </ul>
	- Real-time status of the outputs.
B	Manual Load Switches - Toggle to the ON position to apply 24V DC to outputs A, B, or both. Toggle to AUTO for normal operation. Switch A controls output A, Switch B controls output B.
	<b>PAIR Button</b> - The PAIR button is a multi-use button. The duration that the button is pressed and held determines the function that gets initiated:
<b>C</b>	<b>Press and Release</b> - Cycles through the screens available on the LCD (INFO 1 > INFO 2).
	<b>Press and hold</b> - Press and hold for 2 seconds to put the module into pairing mode. Press and hold for 5 seconds to reset the module. The pairing status stays intact after a reset.
D	Input Power Connections - Connect the outputs from a 24V DC source such as the QOPLPS to inputs A and B on the Companion Module. See the Wiring section below.
E	Output Power Connections - Connect output A and output B to the control wire on a remote controlled breaker. See the Wiring section below.
F	<b>120V AC Connection</b> - Plugs into the 120V AC bus bar in the breaker panel. The voltage at this connection powers the module.
G	<b>Plug-On Neutral Clip (not seen in diagram)</b> - Positioned on the bottom of the module is a neutral clip that plugs directly onto the neutral bar.

#### Features

- Can switch On and Off a Powerlink remotely controlled breaker.
- The GPM-QP2PWL-20 Relay Companion Module is compatible with ¾ inch Schneider/Electric Square D<sup>™</sup> QO<sup>™</sup> plug-on neutral load centers.
- Dynamic remote management of loads.
- Communicates over the air using Bluetooth Low Energy (BLE) technology.
- Two switches positioned on the front panel can be used to manually toggle the power to outputs A and B On and Off.
- Color LCD display for easy identification and load status.

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#### **Important Information**

- A separate 240V AC to 24V DC power supply such as the Schneider electric QOPLPS is needed. This power supply feeds the Companion Module with the required 24V DC.
- Each relay output can switch up to 10 amps.
- To determine the number of spaces needed in each panel, add the number of spaces required for each device described below.
  - A QOPLPS power supply requires two spaces.
  - A GPM-Q2PWL-20 Companion Module requires two spaces.
  - A Powerlink remote controlled breaker requires two spaces.
- Savant recommends not connecting any mission-critical loads such as medical devices when interfacing with this module.



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 Companion 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 a Breaker Panel

- 1. Switch off the breaker panel's main breaker so no power is supplied to the panel.
- 2. Position and install the QOPLPS power supply into the slots where it will be installed in the inCharge Module Panel. Press firmly until the power supply is seated onto the appropriate bus bars.
- 3. Position and install the Relay Companion Module into the appropriate slot in the InCharge Module Panel. Press firmly until the module is fully seated onto the breaker panel's bus bars. The Companion Module is typically installed in the same panel as the power supply installed in step 2 above but doesn't have to be.
- 4. Position and install the Powerlink remotely controlled breaker into one of the slots in the Main Electrical Panel. Press firmly until the breaker is fully seated onto the breaker panel's bus bars.

HELPFUL! The Powerlink remotely controlled breaker is typically installed in a separate electrical panel that is set up to accommodate all remotely controlled circuit breakers.

5. Make connections. See the Wiring section on the next page.

#### Wiring

Use the diagram below when making connections between the Companion Module, associated breakers, and load(s). The **Savant Panelized** Lighting Deployment Guide available on the Savant Community contains additional wiring diagrams.



IMPORTANT! When making connections, observe all general electrical best practices including local wire sizing guidelines. See the Branch Circuit Minimum Size of Conductors table on the previous page.

### Additional Documentation

Further information is available in the documents listed below and can be accessed via the Savant Customer Community.

- Panel Bridge Controller with PoE (PBC-P1000) QRG
- Savant Panelized Lighting Deployment Guide

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Notes