

**Plug & Play Autonomous Control. Palm Sized I/O.**

# Cell Modules

PassiveLogic® Cell® modules are smart, distributable controllers—the building blocks of the PassiveLogic autonomous building platform. Cell modules adapt to most applications in any location. They plug into the PassiveLogic Hive™ and PassiveLogic Hive Mini™ controllers, providing software-definable I/O in the PassiveLogic Autonomy Studio™ app. With just a few clicks you generatively design your I/O, step through guided wiring, and create a custom configuration to meet any project's requirements. The Cell modules were designed with installers in mind—the modules ensure accuracy and virtually eliminate manual commissioning through built-in power monitoring, automated I/O testing, and digital point mapping and labeling.

## Cell I/O. Meet the Modules.

There are four different PassiveLogic Cell module types for multiple use cases and protocols:

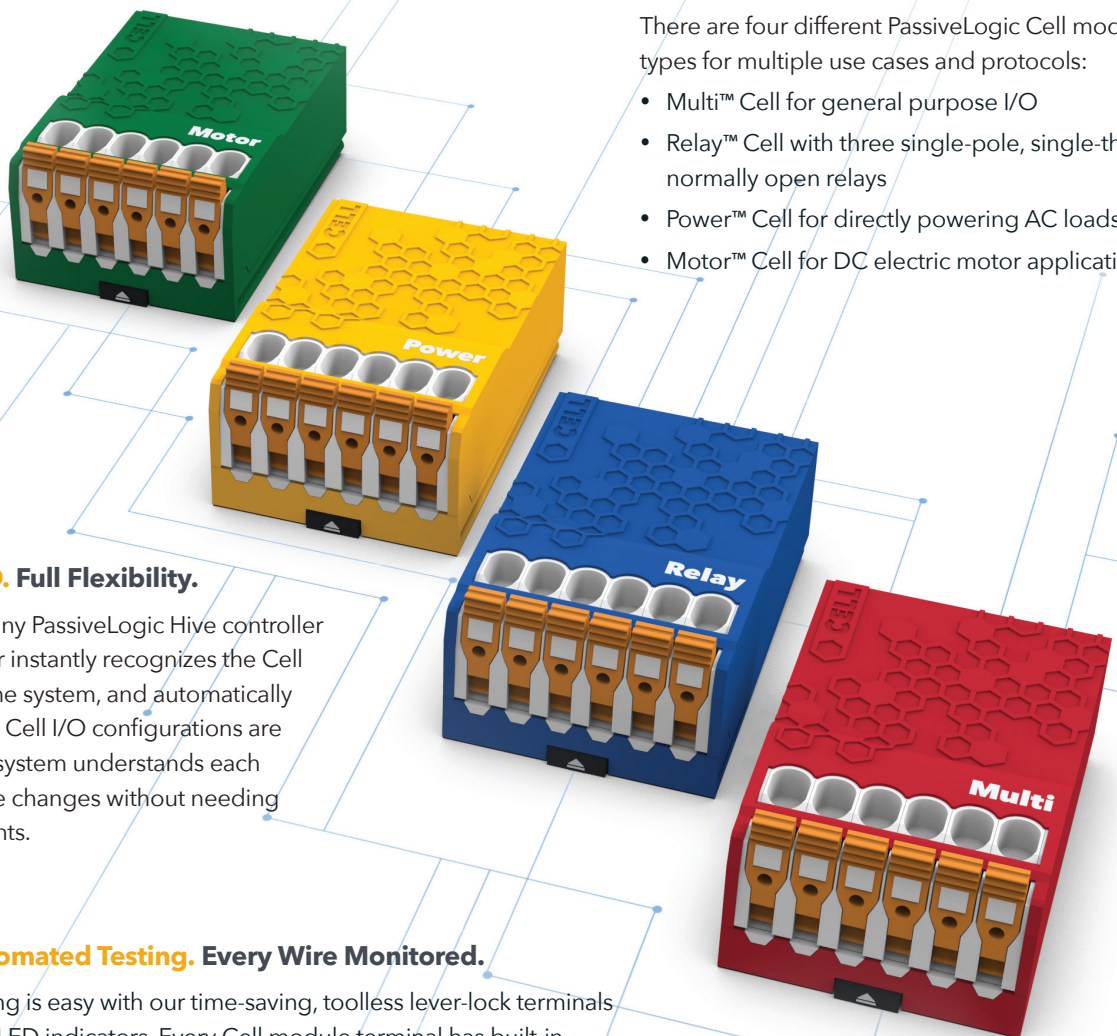
- Multi™ Cell for general purpose I/O
- Relay™ Cell with three single-pole, single-throw, normally open relays
- Power™ Cell for directly powering AC loads
- Motor™ Cell for DC electric motor applications

## Software Defined I/O. Full Flexibility.

Push a Cell module into any PassiveLogic Hive controller to lock it in. The controller instantly recognizes the Cell module type, adds it to the system, and automatically updates your digital twin. Cell I/O configurations are software-defined, so the system understands each connection and can make changes without needing physical wiring adjustments.

## Automated Testing. Every Wire Monitored.

Wiring is easy with our time-saving, toolless lever-lock terminals and LED indicators. Every Cell module terminal has built-in voltage, current, and power monitoring. Cell modules continuously monitor their wired connections to ensure that the system is properly configured and running optimally. Continuous commissioning is now a practical reality.



## Cell Modules

### Cell Modules Specifications

#### Multi Cell Module (6 software-defined ports)

##### Input Support

<b>Temperature</b>	Thermistors, RTD	<b>Digital</b>	0–24VDC
<b>Voltage</b>	0–24VAC, 0–24VDC	<b>Frequency</b>	0–10kHz
<b>Current</b>	0–20 mA	<b>Resistance</b>	0–1MΩ, auto-ranging

##### Output Support Per Channel (Up to 6)

<b>DC output</b>	0–24VDC, 0–60 mA (programmable)	<b>AC output</b>	24VAC, 500 mA
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##### Ground

<b>All ports</b>	Software-defined and individually groundable
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##### Serial Communications

<b>Protocols</b>	BACnet MS/TP, Modbus RTU, 1-Wire
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#### Relay Cell Module (3 single-pole, single-throw, normally open relays)

<b>Supports</b>	Motors, fans, pumps, lighting, and more
<b>Features</b>	Voltage, current, and power monitoring for contacts of each relay
<b>Contacts</b>	Rated 250VAC, 10A

#### Power Cell Module (2 power control blocks)

<b>Supports</b>	Motors, fans, pumps, lighting, and more
<b>Features</b>	Voltage, current, and power monitoring for each output
<b>Power</b>	2 outputs, up to 1 Amp, voltage same as PassiveLogic Hive power supply

#### Motor Cell Module (2 DC motor control blocks)

<b>Supports</b>	DC motors, motor control
<b>Features</b>	PWM speed control, voltage, current, and power monitoring, overcurrent/torque protection, optional tachometer feedback external drivers
<b>Power</b>	Up to 12VDC at 2 Amps or 24VDC at 1 Amp

#### Wire Options (All)

<b>Wire gauge</b>	10–24 AWG
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#### Mechanical (All)

<b>Depth   Height   Width</b>	3.05 in (77.53 mm)   1.27 in (32.34 mm)   1.98 in (50.20 mm)
<b>Weight (varies by Cell)</b>	≈ 2.8 oz (80 g)

### The PassiveLogic Ecosystem

All Cell® modules are compatible with the PassiveLogic Hive™ and PassiveLogic Hive Mini controllers. In the PassiveLogic Hive controller, use up to eight Cell modules for a total of 48 control points. In the Mini, you can install two Cell modules for a total of 12 control points.

Push a Cell module into the PassiveLogic Hive or Mini controllers and it locks into place, then eject it with the push of a button. Cell modules include our toolless terminals that securely connect to almost any wire (10–24 AWG).

Cell module types are automatically identified by the PassiveLogic Hive and Mini controllers. Only use the Cell modules you need—no more tricky point-license pricing structures.

In the Autonomy Studio app, I/O is software-defined, and the visual wiring assistant helps you avoid common errors during the wiring and installation process. On a Cell module, the solid green LED indicator light means you're good to go.

