

Autonomous Control. Everywhere You Need It.

PassiveLogic Hive Mini

The PassiveLogic® Hive Mini® controller is what a remote field controller should be—versatile and flexible with the modular adaptability of our snap-in PassiveLogic Cell® modules. PassiveLogic Hive Minis can be deployed anywhere additional I/O is needed in your building, no need to home run wires. Minis include wired and wireless network options for joining our secure network, as well as IP and RS-485 multi-protocol support to connect to any device in your system.

Networking Options. Unparalleled Flexibility.

Networking is provided on board for flexibility and reliability. Choose between self-federating wireless (mesh network) or wired connections (4-port industrial Ethernet switch).

The PassiveLogic Hive Mini controller also acts as a gateway to enhance reliability, redundancy, and the range of the wireless mesh network connecting all PassiveLogic Hive™ controllers and Sense™ devices in your system.

Remote I/O. Modular Simplicity.

Each PassiveLogic Hive Mini controller has two PassiveLogic Cell module bays for software-defined I/O capability, providing up to 12 control points anywhere in your building. Quickly deploy any of the four types of Cell modules—Multi™, Relay™, Power™, or Motor™ Cells—to fit your building needs.

The PassiveLogic Hive Mini controller enables VAV and AHU control applications through a built-in differential pressure sensor that can measure airflow, filter status, and more.

Connect to Anything. Anywhere.

Connect to RTUs, actuators, IoT devices, and other equipment fitted with packaged controls with built-in IP protocol support (BACnet/IP, BACnet/IPv6, Modbus TCP). Add a Multi Cell module for additional protocol support (BACnet MS/TP, Modbus RTU, and 1-Wire).



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PassiveLogic Hive Mini Specifications

Network

Enhanced wireless mesh	100 ft (30 m) maximum mesh hop
Ethernet	4-port industrial switch (10/100MB)

Connectivity Options

Protocols built-in	BACnet/IP, BACnet/IPv6, Modbus TCP
Protocols w/Multi Cell	BACnet MS/TP, Modbus RTU, 1-Wire
SMA antenna connection	Wireless network antenna

Onboard Sensing

Differential pressure sensor	+/- 500 Pa (for air flow and other dP applications)
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Cell Module Bays

2 Cell® module bays (mix and match from 4 types of Cell modules)

Multi™ Cell module	6 universal, software-defined I/O terminals
Relay™ Cell module	3 single-pole, single-throw, normally open relays
Power™ Cell module	2 power control blocks (24VAC only)
Motor™ Cell module	2 DC motor control blocks

Environmental Operating Conditions

Operating temperature	14 to 158°F (-10 to 70°C)
Storage temperature	-4 to 158°F (-20 to 70°C)

Power

Power draw	Up to 2 Amps at 24VAC (depending on installed Cell modules), connector accepts 12–20 AWG
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Mechanical

Depth Height Width (excluding antenna)	1.82 in (46.29 mm) 4.63 in (117.72 mm) 5.91 in (150.2 mm)
Weight	6.70 oz (190 g)
Surface mount	2 self-tapping screws (included)

The PassiveLogic Ecosystem

The PassiveLogic Hive Mini™ controller is a flexible, quick-installing, remote extension to the PassiveLogic platform. Connect to just about any wired or wireless system device in any location. As an advanced mesh gateway, it securely extends the range of the wireless mesh network, enhancing reliability and redundancy.

Versatility

The PassiveLogic Hive Mini solves many challenging control applications by connecting our ecosystem to common equipment types, including but not limited to:

- Valves
- Actuators
- Fan coil units
- Sensor network applications
- RTU (rooftop units)
- AHU (air handling units)
- VAV (variable air volume) systems
- VRF (variable refrigerant flow) systems
- Lighting control systems
- IoT device networks
- Motors (AC and DC)

