

Oak Series

Indoor Climate Intelligence

Model: OakRoom

Wireless Unit Controller



The OakRoom controller analyzes and manages data from HVAC units and various types of sensors, to create comprehensive climate automation in any given space, instantly.

Best equipped to maintain climate comfort in common areas, it easily connects to Air Handling Units, Roof Top Units, Fan Coil Units, and more.

The OakRoom can receive data from any number of occupancy sensors, up to 8 window sensors and wired/wireless temperature and humidity sensors, for 360° monitoring and control over large, complex zones.

Supports High Voltage appliances

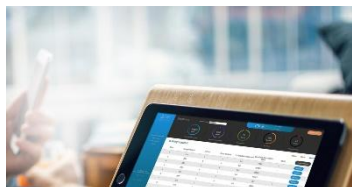
Up to 240V operating voltage enables connection to large scale HVAC units.

Peak Shaving

Weather and utility tariff-based machine learning cuts off peak charges.

Room Thermal Profiling

24/7 sensing and analyzing enables differentiation of controlled zones for true energy optimization.



Compatible with Oak Series User Interfaces

OakRemote and Online Dashboard.

- ✓ **Plug & play with any HVAC unit**
- ✓ **Multiple sensor capability**
- ✓ **Easily Programmable via web platform**

	OakRoom V2
Body Dimensions	5.67' x 4.72' x 1.38' 144mm x 120mm x 35mm
Wireless Range	Through walls: up to 100ft (30M) In open spaces: up to 0.3 Miles (500M)
Operating Voltage	24V AC/DC or 85-240VAC, +/- 10%, 50/60Hz 3V CR2032 backup battery
Operating Temperature	Commercial 32-113°F 0-45°C Extended ranges available upon request
Control Outputs	Fan High (BI) Fan Low (G) Compressor (Y) Heat/RV (W) Aux control (Aux) Proportional (0-10V)
Switching Circuit Parameters	Fan/A/C: 5A max (2A*) Heat/Aux: 10A max (7A*) * UL certified, resistive-inductive load, power factor 0.6-1
Wired Sensor Terminal	Temperature 1 Temperature 2/Current sense PIR IR RX/TX Door/Window
Temperature Sensor	Temperature range: -67~+257°F -55~+125°C Accuracy: 0.9°F (14~+185°F range) 0.5°C (-10~+85°C range)
Occupancy Sensor	Wired PIR sensor Detection distance: up to 33ft (10M) Beam width: 110° (H) x 60° (V)
Additional Integral Sensors	Current sensor
Additional Wireless Sensors	Occupancy sensor Magnetic door/window sensor Temperature/Humidity sensor
RF Frequency	2.4GHz
RF Transmission Power	19dBm
Other Means of Communication	IR
Oak Series Compatibility	OakRemote, Online Dashboard
Certification	FCC,UL 60950/60730 FCC ID: 2AH19YB25301

Typical HVAC applications

4 Pipe, 2 Fan, Heat/Cool FCU	PTAC, 2 Fan with Heat Strip
2 Pipe, 2 Fan, Cool Only FCU	2 fan, modulating heat/cool (0-10VDC)
Heat Pump, 2 Fan	IR controlled split A/C or PTAC