

Oak Series
Indoor Climate Intelligence

Model: OakSocket
Wireless Unit Controller



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

The OakSocket controller analyzes data from HVAC units and various types of sensors, and controls them to create comprehensive climate automation in any given space, instantly. With a simple Plug & Play installation, the OakSocket is the ideal solution to digitizing old PTAC units, and uniting them into one centralized platform.

The device is easily deployed as an intermediate connector between the electrical outlet and the HVAC unit (Split units, PTAC units, and more). It can interact with the unit via IR transmission or wired thermostat interface. It can also initiate a full unit activation or shutdown via an internal high-power relay. The integrated power sensor allows precise power consumption monitoring of the HVAC unit.

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

Supports High Voltage appliances

Up to 240V operating voltage enables connection of high power HVAC units.

Peak Shaving

The OakSocket monitors real time energy consumption. Weather and utility TOU machine learning enables it to cut 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
Oak Remote and Online Dashboard.

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|------------------------------|--|
| Body Dimensions | 1.18' x 2.17' x 3.74' (30mm x 55mm x 95mm) |
| Weight | 140 g |
| Wireless Range | Through walls: up to 100ft (30m) |
| Operating Temperature | Commercial, 32-113°F (0-45°C) Extended ranges available upon request |
| Control Outputs | Thermostat I/F (Y,W,GL,GH) IR RX/TX |
| Supply | 100-240V ~ 50-60Hz |
| Self-consumption | 0.1A |
| Switching Capacity | 20A, power factor 0.6-1 |
| Additional Integral Sensors | Current sensor |
| Additional Wireless Sensors | Occupancy sensor Magnetic Door/Window sensor Temperature/Humidity sensor |
| RF Frequency | 2.4GHz |
| RF Transmission Power | 19 dBm |
| Other Means of Communication | IR |
| Oak Series Compatibility | OakRemote, Online Dashboard |
| Certification | FCC,UL 60730-1 FCC ID: 2ALPH-E18 |

| P/N | OakSocket-V2-N5-15 | OakSocket-V2-N5-20 | OakSocket-V2-N6-15 | OakSocket-V2-N6-20 |
|-------------|--------------------|--------------------|--------------------|--------------------|
| Plug form | | | | |
| Socket form | | | | |

Typical HVAC applications

- Cooling/Heat pump PTAC units with remote thermostat interface (1-stage cooling/1- stage heating)
- IR controlled split A/C or PTAC units