ZEN HQ™

DEMAND RESPONSE & ENERGY MANAGEMENT FOR SMALL TO MID-SIZED MULTI-SITE CUSTOMERS

Zen HQ is a simple energy management platform that allows remote monitoring and control of HVAC, lighting, EV Chargers, and battery storage, which can cut energy costs immediately. For even more savings, Zen HQ provides AutoDR integrations connecting small and mid-sized footprint commercial businesses to utility demand response programs.

OUT OF THE BOX DEMAND RESPONSE

Zen HQ allows for simple automation of demand response events for small to mid-sized multi-site customers!

- Once the demand response event is set by the utility company, Zen HQ automatically triggers the participation.

- One-hour prior to the demand response Zen HQ automatically begins pre-cooling the building by lowering the setpoint of thermostats by 2-4 degrees to ensure comfort for employees and customers.

- When the demand response event begins, Zen HQ automatically triggers a change in the cooling setpoint of the thermostats up by 2, 4 , or 6 degrees and can either turn off or dim lighting.

- At the end of the scheduled demand response event, the connected devices will resume to their normal schedules as set through the Zen HQ portal.
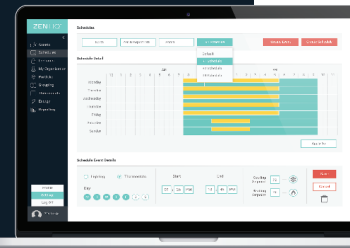
All of this is done automatically, and can be subtle or advanced, which simply translates into how little or how much the user wants to earn from the Demand Response Program.

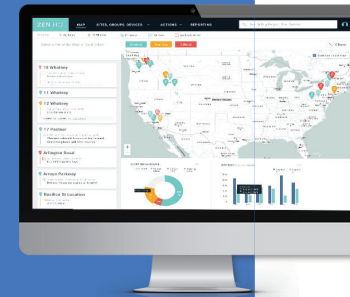## ZEN HQ KEY BENEFITS TO END CUSTOMERS

CONTROL

Apply standard on/off/dimming schedule templates or customize a 7 day schedule with OpenADR enabled thermostats, lighting controls, and more.
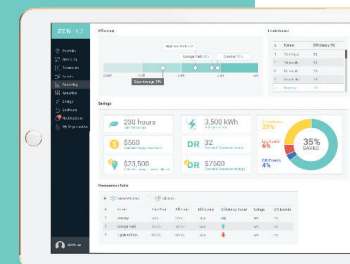
MONITOR

Monitor temperatures and alerts throughout the entire building or individual circuits on a national, regional or site level, all remotely.

ANALYZE

Identify and benchmark highest energy-use sites in a portfolio. Understand energy use behavior and trends to drive additional savings.

ZEN HQ™

ZEN THERMOSTAT WI-FI OR ZIGBEE

SYSTEM CONTROL

TEMPERATURE CONTROL MODES	COOL, HEAT, AUTO AND EMERGENCY HEAT
FAN MODES	1, 2, OR 3 STAGE FAN SYSTEMS, WITH AUTO FAN MODE
ENVIRONMENT SENSING	TEMPERATURE
TEMPERATURE ADJUSTMENT	1 °F OR 0.5 °C

COMPATIBILITY

HEATING SYSTEM TYPES	FORCED AIR, HEAT PUMP, GAS, ELECTRIC, MILLIVOLT, HYDRONIC
HEATING STAGES	1 OR 2, PLUS EMERGENCY HEATING
COOLING SYSTEM TYPES	HEAT PUMP, EVAPORATIVE, HYDRONIC
COOLING STAGES	1 OR 2
HEATPUMP SUPPORT	TWO- STAGE REVERSIBLE HEAT PUMP (WITH AUXILLARY/ EMERGENCY HEAT)

CONNECTIVITY

WIRELESS PROTOCOLS	802.11 B/G/N 2.4GHZ / ZIGBEE
FIRMWARE UPGRADE	OVER-THE-AIR (OTA) UPGRADE
WORKS WITH	WI-FI - IOS (IPHONE, IPAD, OR IPOD TOUCH 9.0S OR LATER) ANDROID (6.0 OR LATER) ZIGBEE - RAINFOREST, SMARTTHINGS, SECURIFI, AND OTHER ZIGBEE HA GATEWAYS

SETUP AND INSTALLATION

HVAC SYSTEM RATING	24V AC (NOMINAL)
INSTALLATION	PAPER-BASED QUICK-START GUIDE APP-BASED SYSTEM SETUP AND WIRING GUIDE

DIMENSIONS

THERMOSTAT	4.33" x 4.33" x .88"
WALL PLATE	5.91" x 4.73" x .20"

LOAD CONTROLLER

SPECIFICATIONS

INPUT VOLTAGE	120 VAC
INPUT FREQUENCY	60 HZ
NOMINAL OPERATING TEMP.	77°F, 25°C
NUMBER OF CIRCUITS CONTROLLED	UP TO 10 PER DEVICE

SYSTEM CONTROLS

MODES	ON/OFF

CONNECTIVITY

WIRELESS PROTOCOL	ZIGBEE (HA 1.2)
WIRELESS RANGE	UP TO 100 FT FROM CONTROLLER OR CLOSEST ZIGBEE DEVICE

SETUP AND INSTALLATION

INSTALLATION	REQUIRED INSTALLATION BY A CERTIFIED ELECTRICIAN

DIMENSIONS

LOAD CONTROLLER	11.93" x 10.15" x 4.08"

MAXIMUM CIRCUIT RATING PER POLE

RESISTIVE RATING	25 AMPS
MOTOR RATING	10 AMPS
LAMP RATING	20 AMPS

ON/OFF/DIMMING SWITCHES

SPECIFICATIONS

INPUT VOLTAGE	120 VAC
INPUT FREQUENCY	60 HZ
NOMINAL OPERATING TEMP.	77°F, 25°C
LOAD RATINGS	• INCANDESCENT - MAXIMUM LOAD: 600W • LED/CFL: 150W

SYSTEM CONTROLS

MODES	ON/OFF/DIM

CONNECTIVITY

WIRELESS PROTOCOL	ZIGBEE (HA 1.2)
WIRELESS RANGE	UP TO 100 FT FROM CONTROLLER OR CLOSEST ZIGBEE DEVICE

SETUP AND INSTALLATION

INSTALLATION	RECOMMEND INSTALLATION BY A CERTIFIED ELECTRICIAN

DIMENSIONS

IN-WALL SMART SWITCH	4.17" x 2.13" x 1.82"

openADR™ 2.0a CERTIFIED