The Smart A.I. Technology for Temperature Management

A new generation thermostat Tri Cascade A.I. Thermostat – THERMORING Model 10ze Smart Thermostat retains a traditional thermostat control experience design, taking the design of a retro volume knob for the most user-friendly control experience for everyone.

THERMORING adds in a related mobile app and ecosystem with Voice-Activated Assistant. It also has built-in machine learning algorithms, helping you to setup the best energy efficient temperature environment.

- Device control from anywhere
- Pre-programmed energy saving settings
- Auto Scheduling and “Learning” Capable
- Integrates with i.VA voice-activated operation
- Motion, Temperature, Humidity, and Ambient Light sensors
- Outdoor weather information

By ecosystem with Tri Cascade i.VA (Intelligent Voice Assistant) Grid-EYE and motion sensor, THERMORING will be aware of the AT HOME and AWAY status to determine the in-home temperature setting for your best comfort. THERMORING is integrated with telecom’s NB IoT and 802.11n gateway, making THERMORING a self-Internet independent platform. THERMORING does not require connection to any router, the NB IoT connection will always stay with the system even when the property is vacant.

By using the Microsoft Azure Multi-Tenant Cloud and the new revolutionary Tri Cascade smart device setup architecture, THERMORING is able to provide a true B2B service to smart city, smart neighborhood development or hospitality management. The THERMORING is designed and integrated into the property, the home owner or building management can easily resell or rent out the property to others as a smart house or smart building without unplugging or re-installing the system.
SPECIFICATIONS

Platform Specifications

Processor
High performance low power 32 bits ARM Cortex-MX28 processor.

Capacity Touch button
There are 6 touch buttons with LED indicator to provide FAN control, AUTO and ON, plus System Mode selection, COOL, HEAT, OFF, and SMART.

FAN control, AUTO means to control the FAN automatically by processor, ON means to force the FAN ON.

System Mode selection, COOL means to cool down the temperature, HEAT means to heat up the temperature, OFF means to turn off thermostat control, SMART means to enable auto learning control.

Sensor
THERMORING provides four sensors, they are temperature, humidity, ambient light sensor and PIR sensor which used to detect the environment for THERMORING operation.

Edge Storage
Provides 8/16G edge storage to save the device information, control parameters, schedule timing table, and internet settings.

Communication
THERMORING provides NB IoT connectivity to the internet, also there is a specify cloud service for THERMORING.

Feature Specifications

Features
- Auto-Schedule in local: Yes
- Home/Sleep/Away Assist: Yes
- Advanced Fan Control: Yes
- Exception Temperature Notify: Yes
- Weather Conditions: Yes
- Energy Optimize: Yes

Temperature Control
- Heating Stages: 2
- Cooling Stages: 2
- Temperature Swing: +/- 1° F

Sensors
- Weather Conditions: Internet
- Humidity Sensor: Up to 95% RH
- Temperature Sensor: 32° to 104°F (0° to 40°C)
- Motion Sensor: PIR
- Ambient Light Sensor: 1 to 10,000 Lux

Networking
- Connectivity Technology: 2.4GHz wireless
- Wireless Protocol: 802.11b/g/n
- Connectivity: Phone or tablet with iOS 8 or later, or Android 4 or later

Internet of Things (IoT)
- Intelligent Assistant Compatible: Alexa, Google Home
- Voice Controlled: Indirect

Setup
- Type: Wall mountable
- Included Accessories: Mounting Kit
- Mounting screws and labels: Yes
- Installation Guide: Yes

Service & Support
- 2 years warranty: Yes