

UPTIME DEVICES™

Network and Web Enabled Technologies™



Infrastructure Monitoring. Simplified.

Uptime Devices designs and commercializes web-enabled infrastructure monitoring solutions that notify you when an environmental, security or power threat is detected. The web interface allows instant access to real-time data, graphs, logs, and control of external power devices.

The products produced by Uptime Devices are scalable, reliable, easy to use and secure.

Uptime Devices: Protecting Business since 2001

Uptime Devices' monitoring solutions have been used to monitor many applications including data centers, cold storage, power plants, manufacturing facilities, blood banks and other areas where a stable environment is vital to business operations.

Protect your assets from downtime with Uptime Devices.

RPM Console Manager (RPM CM) **1**

Environmental Sensors **2**
 Daisy Chain Sensor® (RPM CM Only)

RS-232 (PDU) RIMS (232 RIMS)
 HEAT RIMS (TRIMS)
 2 Port Power RIMS (VRIMS)
 10 Port Dry Contact RIMS (DCRIMS)

Intelligent Power Meter **3**
 (RPM CM Only)

Single Phase AC Meter (ACPWR)
 3 Phase AC Meter (3ACPWR)
 DC Meter (DCPWR)
 Current Transformers (CT)
 Wireless Power Meter Adapter (WPWR)

Sensor Hub **4**

Sensor Hub (SH-2)
 Sensor Hub Plus I (SH-2+I)
 Sensor Hub Pro (SHPro)

Environmental Sensors **5**
 (Sensor Hub Only)

Temperature Sensor (SATS)
 Humidity Sensor (SAHS)
 Temp/Airflow Combo Sensor (SATA)
 Temp/Humidity Combo Sensor (SATHI)
 Voltage Sensor (SAVS)

Environmental Sensors **6**
 (RPM CM and Sensor Hub)

Liquid Sensor (SAWS)
 Dry Contact Sensor (SADCC)
 Security Sensor (SASS)
 Dual Security Sensor (SASS-DUAL)
 Smoke Sensor (SMSK)
 Motion Sensor (MTN)
 360 Degree Motion Sensor (360MTN)
 Natural Gas Sensor (LPGGAS)
 CO Gas Sensor (COGAS)
 CO and Natural Gas Sensor (MULTIGAS)

Network Sensor Manager (NSM) **7**
 (RPM CM and Sensor Hub)

Accessories **8**

Camera (CMRA)
 Wireless Camera (WCMRA)
 TrapSnap (TSNP)
 GSM/GPRS Modem (GSMMDM)
 RPM CM Siren (RSIREN)
 Sensor Hub Siren (SHSIREN)

SMS Sensor Alert® **9**

SMS Sensor Alert® (SMS-SA)
 Temperature Sensor (SMS-TS)
 Security Sensor (SMS-SS)
 Dry Contact Sensor (SMS-DC)



RPM Console Manager (RPM CM)

RPM CM is an easy-to-install and use infrastructure monitoring solution. RPM CM provides disaster prevention and early detection and warning of equipment failures. When conditions exceed user-defined limits, alert notifications are sent out via E-mail, SNMP or SMS.

The RPM CM creates a single interface for monitoring and control of virtual and physical data collected by our Remote Intelligent Multi Sensors® (RIMS) that can be daisy chained with our proprietary Daisy Chain Sensor® technology. The user interface delivers real-time environmental, power, and security data. This critical data creates a complete picture of overall IT asset health.

Features

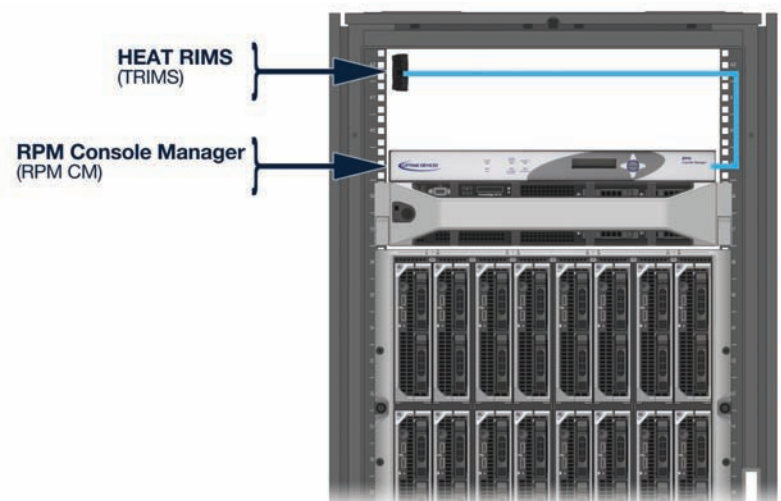
- Up to 250 different RIMS can be connected to a single RPM CM
- Browser-based user interface
- LCD Screen
- IEC power connection
- PoE (Power over Ethernet)
- DB-9 external SMS Modem connection
- Audible Alarm
- DHCP
- SMTP
- Authenticated E-mail notification
- MIB File
- Alarm logs
- 1U rack mountable

Applications

- Environmental Monitoring
- Physical access control monitoring
- Collect power information from multiple PDUs
- Power management and power control of individual outlets

Benefits

- Access real-time power usage data for more efficient power management
- Single console for monitoring and control of both physical and virtual environments
- Preemptive notifications and environmental alarms
- Maximize component life
- Optimize cooling efficiency to decrease energy costs
- E-mail event notification and SNMP traps for defined system events
- Proactive power management during an alarm event



RIMS Features

- Up to 250 different RIMS can be connected to a single RPM CM
- Maximum total daisy chain length is 2000 ft.
- RIMS record and store data to eliminate data logging delays
- Each RIMS has a unique MAC address for easy identification
- Multiple sensors on one RIMS
- Sensor data and threshold settings are stored locally on each RIMS
- Battery backed time / date clock
- RIMS continue to collect data when communication with the RPM CM is lost (using optional external power adapter)



2 Port Power RIMS (VRIMS) monitoring a PDU

RIMS Models

HEAT RIMS (TRIMS)

- Digital Temperature Sensor
- Digital Humidity Sensor
- Airflow sensor
- (1) Dry Contact port
- Auto detect smoke, water, security, motion sensor



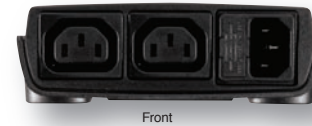
RS-232 PDU RIMS (232RIMS)

- Web-enable to monitor and control 3rd party PDUs: Eaton®, BayTech®, Powerware®, APC®, ServerTech®, Liebert®
- Onboard Temperature Sensor



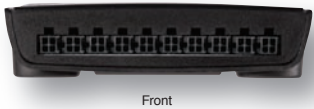
2 Port Power RIMS (VRIMS)

- Power on/off/reboot 120V-250V x 2 outlets
- Monitor current draw on each outlet
- Onboard Temperature Sensor

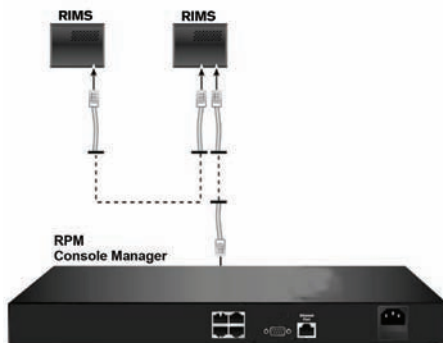


10 Port Dry Contact RIMS (10DCRIMS)

- Monitor 10 dry contact inputs
- Auto detect smoke, water, security, motion sensors
- Onboard Temperature Sensor



Daisy Chain Sensor® (RIMS) connected to RPM Console Manager (RPM CM)



(2) HEAT RIMS (TRIMS) and 2 Port Power RIMS (VRIMS) daisy chained to RPM CM

Intelligent Power Meter Features

With energy costs increasing, conserving and accurately monitoring energy usage becomes even more important. Uptime Devices' meters are ANSI billing class meters.

Applications

- Load profiling and benchmarking
- Data center tenant cost allocation
- Measurement and verification
- Net metering
- Energy conservation and cost reduction
- Green building initiatives and government mandates



Single Phase AC Power Meter
(ACPWR)



3 Phase AC Power Meter
(3ACPWR)



DC Power Meter
(DCPWR)

Current Transformers (CT)

Split and Solid Core CTs are available in many sizes and amperages to fit any project specifications.



Wireless Power Meter Adapter (WPWR)

Turn any Uptime Devices' Intelligent Power Meters into a wireless meter using the Wireless Power Meter Adapter.



Sensor Hub Models

Uptime Devices' Sensor Hubs are compact environmental and security monitoring network devices that notify personnel when conditions exceed user-defined limits. Plug in any intelligent sensor into the Sensor Hub and monitor your assets from anywhere in the world using the Sensor Hub's browser-based interface.

Features

- Browser-based user interface
- DHCP
- SMTP
- MIB File
- Full password protection
- Graphing capability

Benefits

- Preemptive notifications and environmental alarms
- Maximize component life
- Optimize cooling efficiency to decrease energy costs
- E-mail event notification and SNMP traps for defined system events

Applications

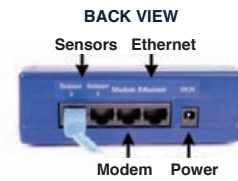
- Environmental monitoring
- Physical access control monitoring

Three network models available:

Sensor Hub (SH-2)



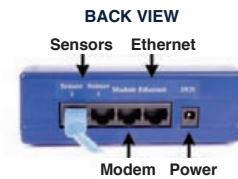
- 2 auto-sense intelligent sensor ports
- 1U rack mountable



Sensor Hub Plus I (SH-2+I)

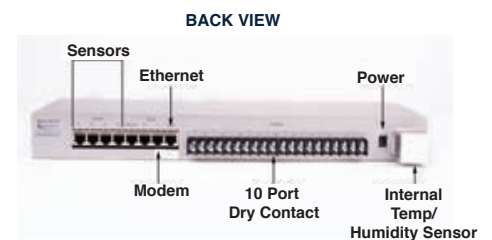
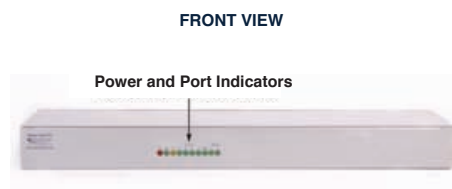


- 2 auto-sense intelligent sensor ports
- 1U rack mountable



Sensor Hub Pro (SHPRO)

- Onboard temperature and humidity sensor
- 4 auto-sense intelligent sensor ports
- 10 Port Dry Contact screw terminal
- 1U rack mountable



Temperature Sensor (SATS)

- Measurement Accuracy Celsius: $\pm 0.5^{\circ}\text{C}$ accuracy from -10°C to $+85^{\circ}\text{C}$ ($\pm 0.9^{\circ}\text{F}$ accuracy from $+14^{\circ}\text{F}$ to $+185^{\circ}\text{F}$)
- Measurement Range: -55°C to $+125^{\circ}\text{C}$ (-67°F to $+257^{\circ}\text{F}$)
- Measurement Rate: One reading each second
- Sensor Power: No additional power needed
- Sensor Type: Semiconductor
- Measurement Rate: One reading each second
- Communications Cable: CAT5 Cable
- Trap Information: Alarm Type, Sensor Number, Sensor Description, Temperature Value



Humidity Sensor (SAHS)

- Measurement Range Relative Humidity: 0 to 100% (-20°C to $+60^{\circ}\text{C}$)
- Measurement Accuracy Relative Humidity: $\pm 3\%$ at 20°C , elsewhere $\pm 5\%$
- Measurement Resolution Relative Humidity: 1%
- Measurement Rate: One reading each second
- Communications Cable: CAT5 Cable
- Sensor Type: Semiconductor
- Sensor Power: No additional power needed
- Trap Information: Alarm Type, Sensor Number, Sensor Description, Humidity Value



Temp/Airflow Combo Sensor (SATA)

- Measurement Range: -55°C to $+125^{\circ}\text{C}$ (-67°F to $+257^{\circ}\text{F}$)
- Measurement Accuracy Celsius: $\pm 0.5^{\circ}\text{C}$ accuracy from -10°C to $+85^{\circ}\text{C}$ ($\pm 0.9^{\circ}\text{F}$ accuracy from $+14^{\circ}\text{F}$ to $+185^{\circ}\text{F}$)
- Measurement Rate: One reading each second
- Communications Cable: CAT5 Cable
- Sensor Type: Semiconductor
- Sensor Power: No additional power needed
- Trap Information: Alarm Type, Sensor Number, Sensor Description, Temperature Value, Airflow (on or off)



Temp/Humidity Combo Sensor (SATHI)

- Measurement Range: -55°C to $+125^{\circ}\text{C}$ (-67°F to $+257^{\circ}\text{F}$)
- Measurement Accuracy Celsius: $\pm 0.5^{\circ}\text{C}$ accuracy from -10°C to $+85^{\circ}\text{C}$ ($\pm 0.9^{\circ}\text{F}$ accuracy from $+14^{\circ}\text{F}$ to $+185^{\circ}\text{F}$)
- Measurement Range Relative Humidity: 0 to 100% (-20°C to $+60^{\circ}\text{C}$)
- Measurement Accuracy Relative Humidity: $\pm 3\%$ at 20°C , elsewhere $\pm 5\%$
- Measurement Resolution Relative Humidity: 1%
- Measurement Rate: One reading each second
- Communications Cable: CAT5 Cable
- Sensor Type: Semiconductor
- Sensor Power: No additional power needed
- Trap Information: Alarm Type, Sensor Number, Sensor Description, Temperature Value, Humidity Value



Voltage Sensor (SAVS)

- Measurement Range: 115 V and 230 V
- Measurement Rate: One reading each second
- Measurement Accuracy: ± 2 VAC
- Communications Cable: CAT5 Cable
- Sensor Power: The sensor must be plugged into the power distribution source that needs to be monitored.
- Trap Information: Alarm Type, Sensor Number, Sensor Description, Voltage Presence (on or off), Current Draw Value



Liquid Sensor (SAWS)

- Measurement Range: Wet or Dry (-20°C +60°C)
- Measurement Rate: One reading each second
- Measurement Accuracy: Able to measure distilled water
- Communications Cable: CAT5 Cable
- Sensor Type: Microprocessor controlled, capacitance measurement technology
- Sensor Power: No additional power needed
- Trap Information: Alarm Type, Sensor Number, Sensor Description, Wet or Dry



Dry Contact Sensor (SADCC)

- Measurement Range: Alarm / Normal
- Measurement Rate: One reading each second
- Communications Cable: CAT5 Cable
- Sensor Power: No additional power needed
- Input: The input pin can then sense whether a switch is open or closed by the completion or interruption of the circuit
- Trap Information: Alarm Type, Sensor Number, Sensor Description, Open or Closed



Security Sensor (SASS)

- Measurement Range: Alarm / Normal
- Measurement Rate: One reading each second
- Communications Cable: CAT5 Cable
- Sensor Type: Reed dry contact switch
- Sensor Power: No additional power needed
- Trap Information: Alarm Type, Sensor Number, Sensor Description, Open or Closed



Dual Security Sensor (SASS-DUAL)

- Measurement Range: Alarm / Normal
- Measurement Rate: One reading each second
- Communications Cable: CAT5 Cable
- Sensor Type: Reed dry contact
- Sensor Power: No additional power needed
- Trap Information: Alarm Type, Sensor Number, Sensor Description, Open or Closed



Smoke Sensor (SMSK)

- Built-in drift compensation reduces false alarms
- Field Replaceable Optical Chamber makes servicing a snap
- Design: Small and blends in with any environment
- Trap Information: Alarm Type, Sensor Number, Sensor Description, Normal or Critical



Wide Angle Motion Detector (MTN)

- Fireproof ABS housing
- Automatic temperature compensation
- SMT adopted, anti-RFI & anti-EMI
- Trap Information: Alarm Type, Sensor Number, Sensor Description, Normal or Critical



360° Motion Detector (360MTN)

- Ceiling mounted
- Fireproof ABS housing
- Automatic temperature compensation
- SMT adopted, anti-RFI & anti-EMI
- Trap Information: Alarm Type, Sensor Number, Sensor Description, Normal or Critical



Natural Gas Detector (LPGGAS)

- Auto reset after alarm
- Sensor with high stability and low power consumption
- Auto check and indication for malfunction
- Natural gas and LPG detection
- SMT adopted
- Trap Information: Alarm Type, Sensor Number, Sensor Description, Normal or Critical



Carbon Monoxide Detector (COGAS)

- Auto reset after alarm
- Sensor with high stability and low power consumption
- Auto check and indication for malfunction
- Carbon monoxide detection
- SMT adopted
- Trap Information: Alarm Type, Sensor Number, Sensor Description, Normal or Critical



Multi Gas Detector (MULTIGAS)

- Carbon Monoxide (COGAS) and Natural GAS (LPGGAS) detector
- Auto reset after alarm
- Sensor with high stability and low power consumption
- Auto check and indication for malfunction
- SMT adopted
- Trap Information: Alarm Type, Sensor Number, Sensor Description, Normal or Critical



NSM Features

- Manage multiple Sensor Hubs or RPM CMs from one screen
- Powerful tool for centralized monitoring & management of multiple sites or cabinets
- Arrange remote monitoring appliances into groups for mass configuration operations, graphing & reporting
- Easy-to-navigate interface
- Administrative control of appliance access and operations by user
- Access to past alerts by device pool/date/appliance

Benefits

- Provides advanced warning of equipment failure so you can act before systems go out
- Increased system availability
- Reduced downtime costs
- Centralized tool improves monitoring efficiency
- Graphing, reporting, exporting tools make it easy to analyze trends and assist in planning
- Promptly deal with unauthorized accesses to equipment
- User-friendly implementation and administration



Screenshots from Network Sensor Manager

| Groups/Devices/Sensors | Type | Value | IP Address | Read Only | Read... |
|------------------------|-------------|-------|---------------|-----------|---------|
| world | | | | | |
| Australia | | | | | |
| d1 | SH2 | 3.2 | 10.1.1.17 | | |
| NSW | | | | | |
| usa | | | | | |
| rrcs-24-153-141-131... | SH2 | 3.9 | 24.153.141... | | |
| 1 | Water | 1 | | | |
| 2 | Humidity | 45 | | | |
| 2 | Temperature | 80 | | | |
| rrcs-24-153-141-130... | SHPRO | 2.1D | 24.153.141... | | |
| 2 | Humidity | 36 | | | |
| 2 | Temperature | 82 | | | |
| 5 | Humidity | 41 | | | |
| 5 | Temperature | 83 | | | |
| rrcs-24-153-141-131... | SH2 | 4.8D | 24.153.141... | | |
| 1 | Water | 1 | | | |
| 2 | Humidity | 44 | | | |
| 2 | Temperature | 80 | | | |
| canada | | | | | |
| ussr | | | | | |

| Probe Name | Port | Type | Sensor Name | Value | Status |
|----------------------------------|------|-------------|----------------------------|-------|--------|
| rrcs-24-153-141-131.sw.biz.r.com | 1 | Water | Water Sensor 1 | 1 | Normal |
| rrcs-24-153-141-131.sw.biz.r.com | 2 | Humidity | Humidity Sensor 2 | 44 | Normal |
| rrcs-24-153-141-131.sw.biz.r.com | 2 | Temperature | Temperature Sensor 2 | 79 | Normal |
| rrcs-24-153-141-130.sw.biz.r.com | 2 | Humidity | Humidity Sensor 2 | 35 | Normal |
| rrcs-24-153-141-130.sw.biz.r.com | 2 | Temperature | Temperature Sensor 2 | 82 | Normal |
| rrcs-24-153-141-130.sw.biz.r.com | 5 | Humidity | Onboard Humidity Sensor | 39 | Normal |
| rrcs-24-153-141-130.sw.biz.r.com | 5 | Temperature | Onboard Temperature Sensor | 83 | Normal |
| rrcs-24-153-141-131.sw.biz.r.com | 1 | Water | Water Sensor 1 | 1 | Normal |

Graph of NSM Data

Reading

90
80
70
60
50
40
30
20
10
0

Sep-24 19:00 Sep-28 19:00 Oct-02 19:00 Oct-06 19:00 Oct-10 19:00 Oct-14 19:00 Oct-18 19:00

- rrcs-24-153-141-131.sw.biz.r.com.W1
- rrcs-24-153-141-131.sw.biz.r.com.H2
- rrcs-24-153-141-131.sw.biz.r.com.T2
- rrcs-24-153-141-130.sw.biz.r.com.H2
- rrcs-24-153-141-130.sw.biz.r.com.T2
- rrcs-24-153-141-130.sw.biz.r.com.H5
- rrcs-24-153-141-130.sw.biz.r.com.T5

Network Camera

The image-updating speed is 30 pcs/sec max for 640 x 480 dots. Catch any moving target through the camera's smooth, high-definition image monitoring. An on-screen user interface with the ability to pan, tilt, and zoom allows you to adjust camera view wherever you may be. Built in sensors can detect changes in sound, motion, and body heat. When the sensors are activated, an instant e-mail alert is sent directly to your mobile phone or PC with a captured image from the network camera.

Two network models available:

Wired Network Camera (CMRA)



Wireless Network Camera (WCMRA)



GSM GPRS Modem (GSMDM) (RPM CM Only)

The GSM GPRS modem allows the RPM CM to send out text message alarms when the network goes down. A standard SIM card is needed to access the cell network via the GSM GPRS Modem. This small modem is a self-contained E-GSM/GSM-GPRS 900/1800 dual-band modem and is GPRS class 10 capable.

Features

- Led function
- SIM card holder
- 2 Watts E-GSM 900 radion section
- 1 Watt GSM 1800 radio section
- Complete shielding
- DC Power supply
- RS232 serial link
- 1.8V/3.3V SIM interface



Sirens

The siren can be triggered manually through the web interface, or it can be configured to turn on during an alarm event.

RPM CM Siren (RSIREN)
105 dB



Sensor Hub Siren (SHSIREN)
100 dB



SMS Sensor Alert® (SMS-SA)

Monitor environmental, power, and security anywhere with the SMS Sensor Alert®

- No network or landline connection needed
- No software to install
- Fast and easy installation

Available Sensors:

- Temperature Sensor (SMS-TS)
- Security Sensor (SMS-SS)
- Dry Contact Sensor (SMS-DC)



Features

Cloud-based data storage

The SMS Sensor Alert® data is stored on a secure data center site and kept private. Logged data can be displayed in a graph, CSV, HTML, displayed in a spreadsheet, or download the data.

Daily Status Notification

A message can be automatically sent daily to confirm that the SMS Sensor Alert® is connected to a cell tower, along with a sensor status report. This function can be disabled any time.

City Power Monitor

The SMS Sensor Alert® detects when mains power is lost. If power is lost the unit automatically switches to internal batteries in order to send a text alert.

Buzzer Alarm

A small buzzer inside the housing can be used to alert local personnel of an issue. The buzzer can be disabled if silent operation is required.

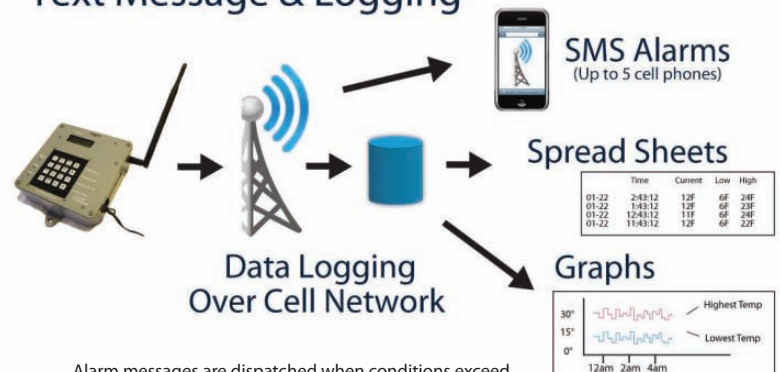
Applications

- Half-wave, local or remote, SMA thread
- Remote site monitoring
- Freezer, refrigerator, chiller, cold storage room monitoring
- Physical access control monitoring
- Environmental monitoring
- Power outage detection

Benefits

- Optimize cooling efficiency to decrease energy costs
- Access real time data and reports from any network at any time
- Quickly identify and correct cooling issues before they cause damage to climate sensitive inventory

Text Message & Logging



Alarm messages are dispatched when conditions exceed user-defined limits. Logging is continuous and can be accessed in a secure cloud-based data log.



512-328-1800
Fax 512-328-1844
sales@uptimedevices.com

www.uptimedevices.com

While every precaution has been taken to ensure accuracy and completeness in this literature, Uptime Devices, Inc. assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

© 2011 Uptime Devices, Inc. All rights reserved throughout the world. Specifications are subject to change without notice. All names referred to are trademarks or registered trademarks of their respective owners.

Uptime Devices, Inc. and its logo are registered trademarks of Uptime Devices, Inc.