

ENERGYLOK[®]

**Environmental Monitoring
System (EMS) 300™**



Wireless Monitoring Solution

*Providing real-time
information to optimize
and protect the data
center environment.*

upsite
technologies[®]

Energy Savings with Wireless Monitoring

The EMS 300™ provides a scalable and affordable wireless environmental monitoring system that integrates seamlessly into most facility management systems. A major benefit of this solution is that you can quickly and easily identify opportunities to improve your mission critical environment and realize opportunities for energy savings.

After Wireless sensor technology was deployed at a demonstration facility, substantial energy-savings benefits were realized, including:

- Cooling load reduced by 48%.
- Total power usage reduced by 17%.
- Annual savings of 657 megawatt-hours (MWh).
- Carbon footprint was reduced by 542 metric tons annually.

Stop Environmental Threats

The EMS 300™ is a powerful tool to monitor your mission critical environment. While network threats get most of the attention in data centers, environmental threats can be just as harmful to IT equipment.

The EMS 300™ allows you to:

- Verify temperature and humidity
- Ensure uptime by monitoring airflow and air pressure to/from racks
- Maintain cabinet security
- Improve uptime by receiving alerts
- Stop threats before they become a problem, such as fluid leaks, overheating, power surges, air quality, vermin, disconnected equipment, etc.

Wireless Monitoring with the EMS 300™

Upsite's new Environmental Monitoring System (EMS) 300™ can be installed across any mission critical facility, including data centers, network closets, server rooms, and telco switch centers. The EMS 300™ offers a fully automated wireless monitoring solution with real-time tracking to help facility managers monitor IT equipment and the environmental threats that surround them.

The EMS 300™ comes with audible, visual, email, and text alarm notifications as well as logging and trending capabilities, which is the most offered on the market today, regardless of the price point. An event log records the 50 most recent alarms and returns to normal events with date and time stamp, extended sensor trending allows you to review and study environmental conditions within your facility. Trending data can also be downloadable as a CSV file.

In addition, the EMS 300™ also has 4 wired digital inputs that can monitor open/closed doors, motion sensors, fire alarms, gas detectors, airflow sensors, and summary alarms from critical equipment including UPSs and generators. The EMS 300™ also has 2 wired relay outputs to control an external device in the event of an alarm condition or supervise inline spot detectors for water leaks..

Real-Time Tracking

Once all your monitoring connections are snapped into place, the real-time information is displayed on the EMS 300's integrated web dashboard which can be accessed from any computer or mobile device.

The screenshot shows the EMS 300 web dashboard interface. At the top, there is a navigation bar with tabs for Home, Security, Sensors, Alarms, Configuration, and Helpdesk. Below this, the system status is displayed: EMS 300, Total Sensors: 15, Active Sensors: 12, Inactive Sensors: 3, and Page 1 of 3. The main area contains a table with columns for ID, Model, Cabinet, Sensor, Value, and Alarm. The table lists various sensors across different cabinets and rows, with values ranging from 27.7°F to 56.1°F. A 'Download' button is visible at the bottom of the table.

ID	Model	Cabinet	Sensor	Value	Alarm
1	300-TSR	Cabinet #1 - Row #1	27.7°F	5	OK
2	300-TSR	Cabinet #2 - Row #1	70.7°F	6	OK
3	300-TSR	Cabinet #3 - Row #1	66.9°F	8	OK
4	300-TSR	Cabinet #4 - Row #1	69.8°F	10	OK
5	300-TSR	Cabinet #5 - Row #1	59.8°F	13	OK
6	300-TSR	Cabinet #6 - Row #1	56.1°F	5	OK
7	300-TSR	Cabinet #7 - Row #1	66.9°F	0	OK
8	300-TSR	Cabinet #1 - Row #2	72.9°F	4	OK
9	300-TSR	Cabinet #2 - Row #2	64.7°F	4	OK
10	300-TSR	Cabinet #3 - Row #2	65.4°F	13	OK
11	300-THS	Cabinet #4 - Row #2	73.3°F 46%RH	1	OK
12	300-THS	Cabinet #5 - Row #2	66.3°F 58%RH	0	OK
13	300-TSC	Cabinet #6 - Row #2	OK	0	OK
14	300-TSC	Cabinet #7 - Row #2	0.0% Contact Open	0	OK
15	300-TSR	PCU Cabinet Row #1	0.0°F	0	OK
16	-	-	0.0%	-	OK
17	-	-	0.0%	-	OK
18	-	-	0.0%	-	OK
19	-	-	0.0%	-	OK
20	-	-	0.0%	-	OK
21	-	-	0.0%	-	OK
22	-	-	0.0%	-	OK
23	-	-	0.0%	-	OK
24	-	-	0.0%	-	OK
25	-	-	0.0%	-	OK
26	-	-	0.0%	-	OK

Seamless Integration

The EMS 300™ communicates with a wide variety of protocols for seamless integration into existing BMS, NMS, or DCIM solutions.

Communication protocols include:

- TCP/IP
- HTML
- SMTP
- TFTP
- BACnet
- Terminal Emulation
- SNMP
- Modbus
- NTP

Battery Life Duration

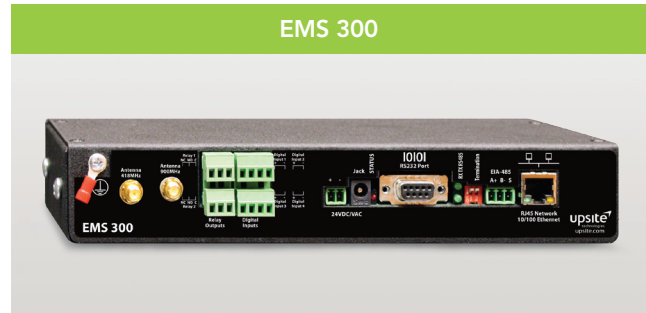
The EMS 300™ features a replaceable lithium-ion battery that can last up to 4 years with 10–17 second intervals—significantly longer than most available wireless sensors.

No Annual Fees

The EMS 300™ is a one-time purchase and requires no annual licensing fees or agreements. Free firmware updates also ensure that the unit is always up-to-date with the most recent features and functionality.

Connect up to 150 Sensors

Connecting more sensors under a single network manager provides efficiency from a cost and management standpoint. Connecting up to 150 sensors under a single manager allows the EMS 300™ to obtain a large number of data points, and a single dashboard. Additionally, the “auto-discovery” feature makes it easy to add new wireless sensors.



Benefits of our Wireless Monitoring

Easier to Physically Deploy
Easily Scalable
No Cables to Manage or Repair
Cost Effective

Replaceable Lithium Ion Battery
Extended Range Capability
Multiple Wireless Signal Options
Auto Discovery and Configuration

Request more information about the EMS 300™ at UpsiteEMS@upsite.com

Products

	Product	Part Number(s)	Description
	Environmental Monitoring System 300™	300-EMS-001 300-EMS-002	Environmental Monitoring System 300™, 418 MHz Environmental Monitoring System 300™, 433 MHz
	Temperature Sensor	300-TSR-001 300-TSR-002	Temperature Sensor, Wireless, 418 MHz Temperature Sensor, Wireless, 433 MHz
	Temperature and Humidity Sensor	300-THS-001 300-THS-002	Temperature and Humidity Sensor, Wireless, 418 MHz Temperature and Humidity Sensor, Wireless, 433 MHz
	Temperature Sensor with Digital Input	300-TSD-001 300-TSD-002	Temperature Sensor, Digital Input, Wireless, 418 MHz Temperature Sensor, Digital Input, Wireless, 433 MHz
	Leak Detector	300-WLD-001	Leak Detector, Wireless, Leader Cable, 418 MHz
	Wireless Point Repeater	300-WPR-001 300-WPR-002	Wireless Point Repeater, 900 MHz, 418 MHz Wireless Point Repeater, 2.4 GHz, 433 MHz
	Rack Mount Brackets	300-RMB-001	Rack Mount Brackets, EMS 300, Black
	Cable Caution Tags	200-CCT-001	Cable Caution Tags, 10 Pack
	Magnetic Door Sensor	200-MDS-001	Magnetic Door Sensor, Wired
	Smoke Detector	200-SDW-001	Smoke Detector, Wired, White
	Motion Sensor	200-MSW-001	Motion Sensor, Wired, White
	Power Adapter	200-PAC-100 200-PAC-120	Power Adapter, 100-240VAC to 5VDC Power Adapter, 120VAC to 24VAC
	Leak Spot Detector	200-LSD-114	Leak Spot Detector, 14 ft Leader Cable, Relay Output, 24VAC/VDC
	Leak Detection Sensing Rope	200-LDS-010 200-LDS-017 200-LDS-025 200-LDS-050	Leak Detection Sensing Rope, 10 ft Leak Detection Sensing Rope, 17 ft Leak Detection Sensing Rope, 25 ft Leak Detection Sensing Rope, 50 ft
	J-Clips	200-JCL-010 200-JCL-025 200-JCL-050	J-Clips for Leak Detection Sensing Rope, 10 Pack J-Clips for Leak Detection Sensing Rope, 25 Pack J-Clips for Leak Detection Sensing Rope, 50 Pack

Contact us to learn more at +1.888.982.7800



+1.888.982.7800 UpsiteEMS@upsite.com upsite.com