AC Voltage Detector Sensor

RFCODE Sensors

Designed to provide real-time detection of voltage presence for any AC-powered electric device.

Features & Benefits

- Encoded Radio Transmissions at 433 MHz
- Real-Time Monitoring of voltage presence for any electrical device
- Fits any round Single Phase, Three-Phase or Split-Phase AC cord - 6mm to 28mm
- Non-disruptive, no need to power down equipment for device installation
- Integrates with RF Code's CenterScape Platform
- Replaceable coin cell battery with low-battery indication

RF Code's AC Voltage Sensor detects the presence of AC voltage in a cable. Simply clip the sensor around any AC power cord and start receiving real-time monitoring of voltage status of the cable.

Operating at 433 MHz, the AC Voltage Sensor is designed for use with almost any electronic equipment. The sensor features simple, non-disruptive attachment to single phase, three phase or split-phase power cords for quick and easy installation.

Using a locking connector, the sensor wraps around the AC power cord exiting the electronic device. It is not necessary to unplug or power-down the equipment during installation. Once installed the sensor will report any change in the presence of AC voltage.

The AC voltage detector senses the electric field around the cable and therefore requires no electrical connection. Because it's fully isolated, system reliability and safety is intact.

The status collected from the AC Voltage Sensor flows via the RF Code readers to the RF Code CenterScape platform as well as other third-party applications for monitoring and display. Notifications, alarms and alerts are sent along with additional CenterScape metrics to data center operators so they can perform maintenance, repairs, migration or graceful shutdown of equipment for critical or disaster events.

Powered by a coin cell battery, the AC Voltage Sensor will perform reliably in extreme temperature environments (from -20 to +70 degrees Celsius). In addition, the sensor performs well after exposure to humidity and hot /cold cycles. The enclosures are impact resistant and temperature stable. The AC Voltage sensor operates with a very low duty cycle that translates to long battery life (typically > 5 years). A low battery alert is provided to indicate when the battery needs to be replaced.

The AC Voltage Sensor is ideal for data center managers that want to monitor critical equipment for power failures for standalone or rack equipment.

RF Code AC Voltage Sensor Specifications

OPERATION	
Operating Frequency	433.92 Mhz
Group Code & Sensor ID Codes	> 540,00 unique IDs per Group Code (RFCRCK)
Typical Transmission Range	> 30 ft. in the data center
Emitted Radiated Power	71.8 dBµV/m at 3 meters (maximum)
Beacon Rate	1s on voltage status change; otherwise every 60s
Modulation	ASK
Stability	SAW stabilized

ENCLOSURE	
Case Length	1.72 in (43.68 mm)
Case Width	2.22 in (56.39 mm)
Case Height	0.30 in (7.62 mm)
Construction	Injection-molded enclosure - Flame retardant UL94-HB rated
Durability	Tough, impact resistant and temperature stable

COMPATIBILITY	
AC Power Cord Type	Unshielded
Supported Cable Size R171	6 – 11 mm OD
Supported Cable Size R173	12 – 28 mm OD

ENVIRONMENTAL	
Operating Temperature	-20° C to +70° C
Storage Temperature	-40° C to +80°C
Sealing	Splash Resistant

POWER	
Battery Type	Lithium CR2032 replaceable coin cell
Smart Sensor Feature	Low battery indication
Battery Life	> 5 years (typical)

REGULATORY	
FCC Compliance	FCC Title 47 CFR Part 15; FCC ID: P6FX
CE Compliance	RED 2014/53/EU Article 3.1(a): Health and Safety RED 2014/53/EU Article 3.1(b): Electromagnetic Compatibility RED 2014/53/EU Article 3.2: Radio Spectrum CE Marked
WEEE Compliant	

SOFTWARE	
CenterScape Platform	Requires version CS 1.3 and higher

RFCODE

9229 Waterford Centre Blvd. ◆ Suite 500
Austin, TX 78758
Tel: 512-.439.2200 ◆ Fax: 512.439.2199
sales@rfcode.com ◆
http://www.rfcode.com