## R130 Dry Contact Sensor



## The "wire-free" R130 Dry Contact Sensor monitors dry contact devices without the deployment and cost limitations of traditional wired solutions.

## **Features & Benefits**

- Encoded Radio Transmissions at 433 MHz
- Monitor Dry Contact-Enabled Devices Using RFID Infrastructure
- Easy-to-Deploy,
  "Wire-free"
  Monitoring
- Immediate
  Notification of Dry
  Contact State Changes
- 10 Second Beacon Rate
- Low Power Consumption for Long Battery Life
- Superior Anti-Collision Technology for High Sensor Densities

The R130 Dry Contact Sensor features two twisted wires that enable connection to a dry contact device. Once connected, the R130 will monitor and report the open and closed states of the device. While the connected device is in either an open or closed state the sensor will beacon the dry contact status once every 10 seconds. When the dry contact state changes the sensor will immediately broadcast three beacons at 0.5 seconds apart with the new dry contact status then return to beaconing once every 10 seconds.

The R130 sensor can be mounted using either the industrial-strength adhesive backing or by using the supplied plastic screw mount. The R130 Dry Contact Sensor cases are impact-resistant and temperature stable. The R130 sensor battery life is typically 5-7 years with a 10-second beacon rate with no more than 250 switching cycles per day. The R130 Dry Contact Sensors have a minimum switching time of 200ms for both open and closed state transitions. Meaning, the R130 sensors are only intended to be used with devices that will be in the open or closed states for more than 2/10ths of a second. If the dry contact device switches from one state and back faster than 200ms, the sensor will not report the state change.

The R130 sensor should be mounted within a few feet of the dry contact device. It is recommended that the wire connecting the dry contact device to the R130 sensor is less than 10 feet in length.

R130 Dry Contact sensors greatly simplify the monitoring of dry contact-enabled devices such as UPS systems, air conditioning systems, smoke alarms, and motion sensors. By eliminating costly and time-consuming wiring efforts, our wire-free dry contact monitoring solutions make deployment simple and efficient.



## RF Code R130 Dry Contact Sensor Specifications

OPERATION	
Operating Frequency	433.92 MHz
Group Code & Sensor ID Codes	> 540,000 unique IDs per Group Code
Typical Transmission Range	> 200 ft (typical)
Radiated Emissions	71.8 dBuV/m at 3 meters (maximum)
Modulation	ASK
Stability	Saw stabilized
Minimum Switching Time (Open)	200ms minimum
Minimum Switching Time (Closed)	200ms minimum
Maximum Switching Rate	20 cycles per minute
Minimum Reporting Time	3 seconds per cycle
Resistance (Open)	> 50M ohm
Resistance (Closed)	< 1M ohm

ENCLOSURE	
Case Length	1.70 in (43.18 mm)
Case Width	2.88 in (73.15 mm)
Case Height	0.50 in (12.7 mm)
Case Weight (with sensor)	0.66 oz (18.71 g)
Wire Length	12 in (304.79 mm)
Construction	Injection-molded polycarbonate enclosure
Durability	Tough, impact resistant and temperature stable
Mounting Options	Industrial-strength adhesive or screw-mountable snap-in bezel

ENVIRONMENTAL	
Operating Temperature	$-20^{\circ} \text{ C to } +70^{\circ} \text{ C}$
Storage Temperature	$-40^{\circ} \text{ C to } +80^{\circ} \text{ C}$
Operating Humidity	< 95% RH non-condensing; not recommended for outdoor applications
Sealing	Splash resistant

POWER	
Battery Type	Lithium CR2032 replaceable coin cell
Smart Sensor Feature	Low battery indication
Battery Life	5-7 years (typical)



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