



Type(s)

Project

Date

Notes

## GENERAL INFORMATION

The MC-31 is a wireless contact sensor that monitors the status of an interior window or door. The sensor provides a reliable and simple method to detect occupancy at entry points when combined with an occupancy sensor for hospitality applications that require control to power the room or setback temperature control devices. The sensor can be configured to monitor closed-to-open, and/or open-to-closed transitions, or just the current state of the device. A coin cell battery provides 10 years of operation based on an average of 10 actuations per day.

The sensor incorporates features that assist the installer in positioning the device to ensure reliable wireless communications. It also includes diagnostic and configuration features to ensure consistent performance. Configurable settings can be adjusted without special tools.

When linked with an Echoflex controller, Range Confirmation technology indicates radio signal strength via LED with a simple button-press and hold sequence.

An optional battery level status message makes it convenient to monitor battery power when the device LEDs are not clearly visible.

These built-in features assist the installer in locating the sensor for optimal wireless performance and be confident of its operation.

## APPLICATIONS

- Hospitality suite temperature setback
- Hospitality suite occupancy state
- Exterior door or window monitoring
- Store room or closet lighting

## FEATURES

- Redundant messaging options increase radio communication reliability
- Works in conjunction with Echoflex Lighting Controllers, Power Load Relays, and Signal Relays
- Integrated Range Confirmation via tri-color LEDs
- User adjustable heartbeat messaging interval
- Magnet position test mode
- User configurable action (closed-to-open, open-to-closed, or both (default)) will trigger an immediate message
- Reliable radio reception range of 24 m (80 ft): typical commercial office spaces, up to 100 m (330 ft) line of sight
- Battery powered with battery life expectancy of 10 years
- Available in 902 MHz and 868 MHz frequencies

## ORDERING INFORMATION

### Magnetic Contact Sensor

MODEL	DESCRIPTION
MC-31U	902 MHz Model
MC-31Y	868 MHz Model

## PRODUCT SPECIFICATIONS

### Equipment Profile

EEP: A5-30-02	Window/Door contact
EEP: D5-00-01	Single Input Contact

### Hardware

Battery	CR2032 coin cell battery
Operating life at full charge	Estimated 10 years at 10 actuations per day
Input	Teach button
Output	Tri-color LEDs

### Communications

Radio frequency	902 MHz (U) or 868 MHz (Y)
Antenna	Integrated whip
Transmission range	24 m (80 ft) - typical commercial office spaces, up to 100 m (330 ft) line of sight
Transmission rate	Configurable heartbeat interval and/or when open or closed event is detected (default is transmit on all events)
Heartbeat message	Configurable from 13 to 54 minutes, default is every 27 minutes.

### Mechanical

Operating temperature	-25°C–60°C (-13°F–140°F)
Relative humidity	5–92% (non-condensing)
Weight	46 g (1.6 oz)
Sensor Dimensions	83 x 28 x 17 mm (3.3 x 1.1 x 0.7 in)
Magnet dimensions	83 x 14 x 13 mm (3.3 x 0.6 x 0.5 in)
Mounting	Four #6 screws, double-sided tape, Velcro® (not provided)

### Regulatory and Compliance

902 MHz model	FCC Part 15.231 Remote Control Transmitter Industry Canada RSS-210
868 MHz model	CE Marked

PHYSICAL

Magnetic Contact Sensor Weight and Dimensions

MODEL	HEIGHT		WIDTH		DEPTH		WEIGHT	
	mm	in	mm	in	mm	in	g	oz
MC-31	16.5	0.65	83	3.3	28	1.1	95	3.4

