

*With their modular design and low price, M100 asset tags provide an economical solution to a wide variety of tracking scenarios.*

## Features & Benefits

- ◆ *Encoded Radio Transmissions at 433 MHz*
- ◆ *Small Size and Low Cost*
- ◆ *Customizable Beacon Rates*
- ◆ *Low Power Consumption for Long Battery Life*
- ◆ *Multiple Mounting and Enclosure Options*
- ◆ *Adaptive Form Factor for Customized Solutions*
- ◆ *Smart Tag Options: Motion and Tamper Detection*
- ◆ *Superior Anti-Collision Technology for High Tag Densities*

The 433 MHz M100 tag is a battery-powered RF transmitter that attaches to items that need to be tracked, located and identified. Every tag broadcasts its unique ID and a status message at a periodic rate (that is programmed at the factory). With a modular design and low price, tags provide an economical solution to a wide variety of problems. RF Code's patented communication protocols allow for very high tag densities. Large populations of tags can be deployed in highly-scalable asset tracking environments.

Typical beacon rates for these general-purpose asset tags range from 2-seconds to 10-seconds. The M100-series tags can be customized to support a broad range of integrated sensors to monitor tag status. Motion activated tags can be programmed to operate at 2 beacon rates: slow when the tag is stationary, faster when the

motion sensor is activated (to provide immediate notification when objects are moving). Tamper switches can be installed to trigger an alert if a tag is removed. The standard low-profile, snap-together tag enclosure allows for battery replacement.

*M100 asset tags feature impact resistant, splash resistant, temperature stable tag cases and read ranges up to 1,000 feet (with optional antenna configurations). The standard tag operates with a very low duty cycle that translates to long battery life (typically 5-7 years at a 10-second beacon rate).*



# RF Code M100 Asset Tag Specifications

## OPERATION

Operating Frequency	433.92 MHz
Group Code & Tag ID Codes	> 540,000 unique IDs per Group Code
Typical Transmission Range	Up to 300 ft
Radiated Emissions	71.8 dBuV/m at 3 meters (maximum)
Modulation	ASK
Stability	Saw stabilized
Sensor Options	Motion, Tamper

## TAG DIMENSIONS (WITHOUT ENCLOSURE)

Tag Width	1.64 in (41.65 mm)
Tag Depth	1.125 in (28.57 mm)
Tag Height	0.30 in (7.62 mm)

## ENCLOSURE

Case Length	1.84 in (46.74 mm)
Case Width	1.35 in (34.28 mm)
Case Height	0.46 in (11.68 mm)
Case Weight (with tag)	.50 oz (14.1 g)
Construction	Polycarbonate
Durability	Tough, impact resistant and temperature stable
Mounting Options	Tape, lanyard, asset strap, cable tie, magnet, screw

## ENVIRONMENTAL

Operating Temperature	-20° C to +70° C
Storage Temperature	-40° C to +80° C
Operating Humidity	< 95% RH non-condensing; not recommended for outdoor applications
Sealing	Splash resistant

## POWER

Battery Type	Lithium CR2032 replaceable coin cell
Smart Tag Feature	Low battery indication
Battery Life	5-7 years *

\* Battery life measured at 2-second motion beacon interval / 12.5-second static beacon interval with 10% motion over the life of the tag.

