

M175 Rugged Tag



With highly durable dual-wall construction, internal gasket and sonically welded case, the M175 rugged tag is perfectly suited for use in harsh outdoor or environmentally exposed locations.

Features & Benefits

- ◆ **Encoded Radio Transmissions at 433 MHz**
- ◆ **Dual-walled construction with internal gasket**
- ◆ **Metal Clip Mounting (Option) for Permanent Installation**
- ◆ **Water-resistant Sonic-Welded Enclosure**
- ◆ **Customizable Beacon Rates**
- ◆ **Low Power Consumption for Long Battery Life**
- ◆ **Superior Anti-Collision Technology for High Tag Densities**

The 433 MHz M175 Rugged Tag is a battery-powered RF transmitter designed with a sealed, water-resistant, crush-proof enclosure for general-purpose asset tracking. Every tag broadcasts its unique ID and a status message at a periodic rate (that is programmed at the factory). These tags provide an economical solution for a variety of asset tracking environments. RF Code's patented communication protocols support high tag densities that allow large populations of tags to be deployed in confined spaces.

M175 Tags can be programmed to operate at a 2-second beacon rate for security applications. This provides a method for rapidly locating and identifying tagged assets as they move through controlled areas. With typical read ranges of 300 feet, a single reader can provide coverage for a large area, such as an industrial lay-down yard or commercial warehouse.

M175 Rugged Tags feature a wear-and-tear resistant, sonically welded enclosure that is especially suitable for use in rugged, environmentally exposed deployments.

The M175 Rugged tags are impact-resistant, splash-resistant and temperature stable. The enclosure is sealed for ingress protection against dust and low-pressure jets of water. The durable teslin labels withstand years of wear and tear. This provides excellent resistance to harsh environments; it can withstand salt water splashes, cleaning solutions, germicides, disinfectants, etc.

Powered by a coin cell battery, the M175 tag will perform reliably in extreme temperature environments (from -20 to +70 degrees Celsius). In addition, the tag performs well after exposure to humidity and hot/ cold cycles. The tag operates with a very low duty cycle that translates to long battery life (typically > 4 years).



RF Code M175 Rugged 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)
Stability	Saw stabilized
Sensor Options	Motion

ENCLOSURE

Case Length	2.51 in (63.75 mm)
Case Width	1.485 in (37.719 mm)
Case Height	1.0 in (25.40 mm)
Case Weight (with tag)	1.8 oz (51 g)
Material	Injection-molded ABS
Durability	Tough, impact resistant and temperature stable
Mounting Options	Metal clip

ENVIRONMENTAL

Operating Temperature	-20° C to +70° C
Storage Temperature	-40° C to +80° C
Sealing	Sonically welded: Resistant to moisture, fluids and rigorous cleaning procedures. Protected against dust and low-pressure jets of water.

POWER

Battery Type	Lithium CR2032 coin cell
Smart Tag Feature	Low battery indication
Battery Life	> 4 years (nominal)*

* Battery life estimate for 2-second simple beacon-only tag deployed in climate-controlled setting, 25° Celsius nominal operating temperature.

