

With its internal gasket, sonically welded case and reusable design, the M163 wristband tag is perfectly suited to student, personnel, and patient tracking applications.

Features & Benefits

- ◆ **Encoded Radio Transmissions at 433 MHz**
- ◆ **Smooth, Form-fitting Design Accepts Standard 3/4" Single-Use Wristbands**
- ◆ **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 M163 Wristband Tag is a battery-powered RF transmitter designed to be worn by children or adults for student, patient or personnel tracking applications. 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 educational settings, healthcare or enterprise use. RF Code's patented communication protocols support high tag densities that allow large populations of tags to be deployed in confined spaces.

M163 Tags can be programmed to operate at a 2-second beacon rate for security applications. This provides a method for rapidly locating and identifying personnel 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 auditorium-style

classroom or hospital emergency room.

The M163 tags are designed to be comfortably worn by the user when attached with standard single-use 3/4" wristbands. Tag cases are impact resistant, splash resistant and temperature stable. They are sealed via sonic-welding at the point of manufacture to resist moisture and fluids. Labels are applied internally to the clear PVC enclosure, allowing the tag to be subjected to rigorous wipe-down and cleaning procedures. Simply discard the wristband and re-use the tags over-and-over.

Powered by a coin cell battery, the M163 tag will continuously operate in extreme temperature environments (from -20 to +70 degrees Celsius). The tag operates with a very low duty cycle that translates to long battery life (typically > 4 years).

M163 Wristband Tags are designed for re-use with disposable straps and can be worn by children or adults for student, patient or personnel tracking applications. The sealed case can be cleaned for repeated use in healthcare facilities or entertainment venues, providing an economical solution for educational settings, healthcare or enterprise use.



RF Code M163 Wristband 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

ENCLOSURE

Case Length	1.854 in (47.1 mm)
Case Width (cover)	1.384 in (35.2 mm)
Case Width (base)	1.890 in (48.0 mm)
Case Height	0.553 in (14.05 mm)
Case Weight (with tag)	.50 oz (14 g)
Material	Clear PVC
Durability	Tough, impact resistant and temperature stable
Mounting Options	Designed for use with standard single-use 3/4" wristbands.

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

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.