

# M174 IR-Enabled IT Location Sensors

Designed for use with difficult-to-tag, rack-mounted equipment, these affordable and reusable IR-enabled sensors work in conjunction with the A740 Rack Locator to allow you to instantly determine and verify the location of rack-based IT assets.

## Features & Benefits

- ◆ Encoded Radio Transmissions at 433 MHz
- ◆ Specially Designed for Use with U-Mounted, Rack Installed Assets
- ◆ Small, Light-weight Active RFID Sensor
- ◆ Industrial-Strength Installation Tabs Keep Sensor Securely in Place
- ◆ New IR Sensor with 4 Diodes Receives IR from Any Direction
- ◆ Superior Anti-Collision Technology for High Sensor Densities
- ◆ Designed for Use with the A740 Rack Locator
- ◆ Easy Installation
- ◆ On-Demand Inventory of Rack-Mounted Assets
- ◆ Low Power Consumption for Long Battery Life

M174 IR-Enabled Location Sensors are equipped with on-board infrared (IR) sensors. These sensors are designed to be deployed in concert with RF Code's A740 Rack Locators and A750 Room Locators. IR-enabled sensors monitor their environment for incoming IR signals and periodically report both their own unique ID and IR location codes. Tagged assets can be rapidly located with rack-level or room-level precision. The M174 enclosure is injection-molded using an IR-transparent material that synchronizes the sensor with the nearest IR transmitter. Since the location is determined via the IR code, there is no need for signal strength calculations or triangulation algorithms.

Designed for use with rack-mounted assets, the M174 battery-powered 433 MHz RF transmitter features replaceable installation tabs for quick and easy installation. These easily replaceable tabs connect to the M174 sensor body, allowing for simple flag, loop, or thumb-screw installation on any standard U-mounted rack assets that need to be tracked, located and identified. The form factor of these reusable sensors ensures clear signal transmission in rack and data center deployments. Every sensor broadcasts its unique ID and IR location using RF Code's patented communication protocol,

allowing for very high sensor densities and ensuring accurate real-time collection of asset inventory and location data.

Powered by a coin cell battery, the M174 sensor will perform reliably in extreme temperature environments (from -20 to +70 degrees Celsius). In addition, the sensor performs well after exposure to humidity and hot /cold cycles. M174 cases are impact resistant and temperature stable. The M174 sensor operates with a very low duty cycle that translates to long battery life (typically > 5 years). These sensors provide an economical solution for a variety of asset tracking environments.

*These compact, powerful, long-lived location sensors install easily on any rack-based asset, enabling continuous reporting of asset location down to the rack level throughout an asset's entire life cycle. User-replaceable mounting tabs allow sensors to be redeployed repeatedly throughout their five-year lifespan.*



# RF Code M174 IR-Enabled IT Location Sensors Specifications

## OPERATION

Operating Frequency	433.92 MHz
Group Code & Sensor 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	1.56 in (39.6 mm)
Case Width	1.27 in (32.3 mm)
Case Height	0.35 in (8.9 mm)
Case Weight (with sensor)	0.4 oz (11 g)
Construction	Lexan polycarbonate
Durability	Tough, impact resistant and temperature stable
Mounting Options	Replaceable, interchangeable flag, loop, and thumb-screw mounting tabs

## 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

## IR COMPATIBILITY

Rack Locators	RF Code A740 with Series 2 Protocol
Room Locators	RF Code A750 with Series 2 Protocol

## POWER

Battery Type	Lithium CR2032 coin cell
Smart Sensor Feature	Low battery indication
Battery Life	> 5 years



9229 Waterford Centre Blvd. ♦ Suite 500  
Austin, TX 78758  
Tel: 512.439.2200 ♦ Fax: 512.439.2199  
sales@rfcode.com ♦  
<http://www.rfcode.com>

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