

# RFID Sensor RS550

## User's Manual

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# 1 Scope

The Radar system is an overhead RFID system using proprietary sensors installed on the ceiling for the purpose of emitting radio frequency energy that scans price tags located on items such as clothing, boxes etc.

## 2 Regulatory Notes



This device is approved under FCC ID: 2BAMERS550.  
This guide applies to the following Model Number: RS550

All GoRadar devices are designed to be compliant with the rules and regulations in the locations where they are sold and will be labeled as required.

### Safety statement

Conforms to UL Std 62368-1 and Certified to CSA Std C22.2#62368-1.

### Pacemakers

Pacemaker manufacturers recommended that a minimum of 15 cm (6 inches) must be maintained between a wireless device and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with independent research and recommendations by Wireless Technology Research.

Persons with Pacemakers: Should ALWAYS keep the device more than 15 cm (6 inches) from their pacemaker when turned ON.

### Other Medical Devices

Please consult your physician or the manufacturer of the medical device, to determine if the operation of your wireless product may interfere with the medical device.

### Co-location statement

To comply with FCC RF exposure compliance requirement, the antenna used for this transmitter must not be co-located or operating in conjunction with any other transmitter/antenna except those already approved in this filling.

### Radio Frequency Interference Requirements - FCC

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

### Radio Transmitters (Part 15)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference
- (2) this device must accept any interference received, including interference that may cause undesired operation.

### U.S. GOVERNMENT END USERS

RESTRICTED RIGHTS. This provision only applies to U.S. Government end users. The Software is a "commercial item" as that term is defined at 48 C.F.R. Part 2.101, consisting of "commercial computer software" and "computer software documentation" as such terms are defined in 48 C.F.R. Part 252.227-7014(a)(1) and 48 C.F.R. Part 252.227-7014(a)(5), and used in 48 C.F.R. Part 12.212 and 48 C.F.R. Part 227.7202, as applicable. Consistent with 48 C.F.R. Part 12.212, 48 C.F.R. Part 252.227-7015, 48 C.F.R. Part 227.7202-1 through 227.7202-4, 48 C.F.R. Part 52.227-19, and other relevant sections of the Code of Federal Regulations, as applicable, the Software is distributed and licensed to U.S. Government

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end users (a) only as a commercial item, and (b) with only those rights as are granted to all other end users pursuant to the terms and conditions contained herein.

#### 15.21 Information to user.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### Canada Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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### 3 Label Quick Response Code: QR Code

The Quick Response code on the left side of the label, when scanned using the appropriate multi-media device, provides a link to information regarding RADAR's products and patents as posted on their website.

To view the information:

1. Open the Camera app from the Home Screen, Control Center or Lock Screen.
2. Select the rear-facing camera. Hold your device so that the QR code appears in the viewfinder in the Camera app. ...
3. Tap the notification to open the link associated with the QR code.

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## 4 Operation

The sensor is approximately 22.6 inches in diameter and 6.1 inches tall, as shown below in Figure 1.

**DC Power:** The sensor is powered by 48 Volts supplied by a POE ++ Gigabit Ethernet switch or injector (Power Over Ethernet technical specification is 802.3 class 4).

**Control:** The sensor control is performed via computer network to sensor. Control software written by Radar.



**Figure 1: Sensor indicating RJ45 Ethernet Connector**

## 5 Ceiling Mount Instructions

**Warning!** This equipment is designed for ceiling mounting only and must maintain the following separation distance from persons.

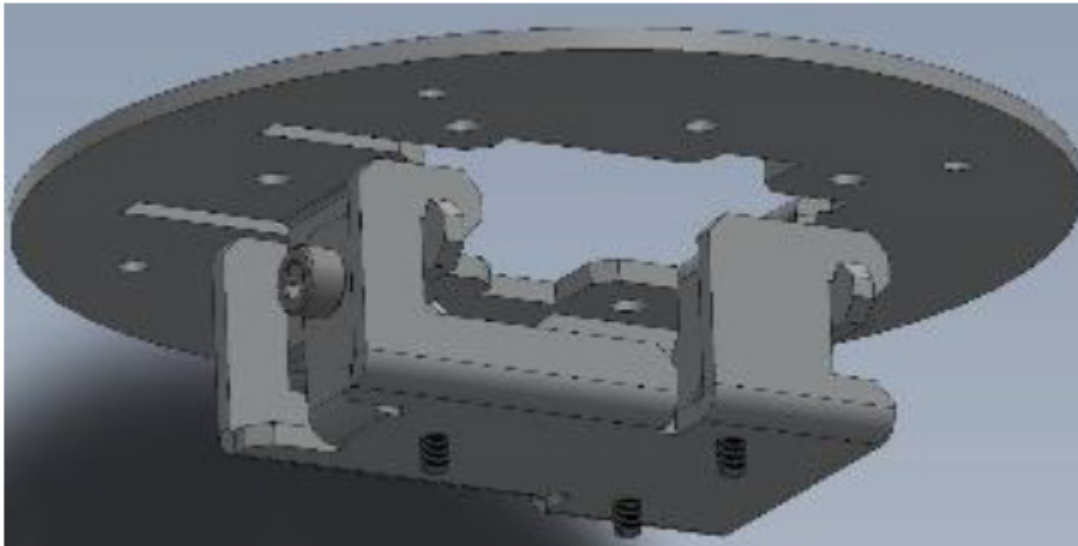
USA: 23cm  
Canada: 34cm

The RS550 unit utilizes a two-piece mounting bracket, that may be shipped separately, consisting of the parts specified below:

- Ceiling support, constructed from 14 Gauge (1.6mm) Aluminum 5052-H32
- Hanging mounting bracket, constructed from 14 Gauge (1.6mm) Aluminum 5052-H32
- Mounting fasteners, Stainless steel M4x0.7, 8mm length, used to secure the mounting bracket to the RS550

The two-piece design allows the ceiling bracket to first be mounted to the ceiling structure. The RS550 unit then easily hung on the bracket and secured in place with a retention screw.

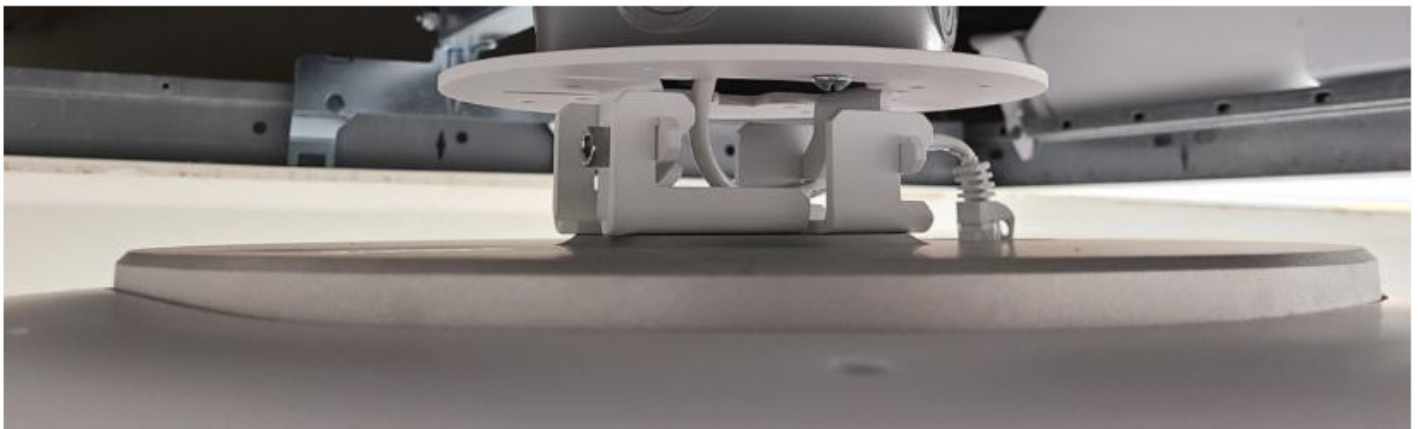
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**Figure 2: Mounting Bracket**

#### RS550 Unit Attachment

After the mounting bracket is securely attached to the ceiling support, the RS550 sensor unit can be hung on the bracket and secured in place with the provided retention screw. The Ethernet cable can then be attached to the RJ-45 port on the top of the unit.



**Figure 3: Sensor attachment bracket and Ethernet cable installed.**

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