



***This RFID antenna is specially designed to be used in double sided arrangements with a single reader for applications that require large reading volumes. The antenna has a very wide beam width to maximize zone coverage.***

With a compact design and robust construction, this circular RFID antenna is resistant to typical environmental influences; the antenna is perfectly suited for applications in agriculture and industrial automation. It is also specially designed to be used in double sided arrangements with a single reader for applications that require large reading volumes. The antenna has a very wide beam width to maximize zone coverage.





## Technical Specifications

**Model number** **304022**

### Electrical

**Frequency Range** 430 to 437 MHz

**Gain** 9 dBi (min)

**VSWR** 1.4:1 (max) 1.2:1 (typ.)

**Azimuth 3 dB Beam width** 68° (typ.)

**Elevation 3 dB Beam width** 70° (typ.)

**Polarization** LHCP

**Side lobes Level at ±90° and Front to Back** -10.5 dB (max)

**Axial Ratio at boresight**  
432 to 434 MHz at 2 dB (max)  
430 to 432 MHz at 4 dB (max)  
434 to 437 MHz at 4 dB (max)

**Input Impedance** 50 (ohm)

**Input Power** 6 W (max)

**Lightning Protection** DC Grounded

### Mechanical

**Dimensions (L x W x D)** 371 x 371 x 40 mm

**Weight** 2.0 kg (max)

**Connector** N - type

**Radome** Plastic

**Base Plate** Aluminum with chemical conversion coating

**Outline drawing** See below

**Mounting kit** MT-120018

### Environmental

Test	Standard	Duration	Temperature	Notes
Temperature	IEC 68-2-1/2	72 h	-55 °C to 71 °C	
Temp. Cycling	IEC 68-2-14	1 h	-45 °C to 70 °C	3 Cycles
Thermal shock non-oper.		-30 °C to 70 °C	Ramp 30 °C/min	
Humidity	ETSI EN300-2-4 T4.1E	144 h		95%
Water tightness	IEC 529			IP67

### Dust resistance

**Solar radiation** ASTM G53 1000 h

**Ozone resistance** ETSI 300



**Flammability**      UL 4      Class HB

**Quasi random vibration**      20 g rms for 4 hours

**Vehicle vibration**      1g rms, 10-500 Hz, in 3 axis      6 hours total, 2 h in each axis. Accelerated wear – an additional 50 h in worst case axis

**Operating**

**Mechanical shock**      10g, 11 msec,

**Operating**      half sine pulse



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- [GAORFID.com](http://GAORFID.com)
- [GAOTek.com](http://GAOTek.com)
- [GAORFIDAssetTracking.com](http://GAORFIDAssetTracking.com)
- [GAOComm.com](http://GAOComm.com)
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