



The tags enable six meters long range communication from either a handheld or fixed RFID reader or interrogator by using the ultra-high frequency (UHF) technology.

The semi-passive RFID response tag series offers precise and real-time data collection for the identification, tracking, and localization of assets or people. Its intelligent use of Ultra High Frequency (UHF) technology enables 6m long range communication from either a handheld or fixed RFID reader or 'interrogator'. High volume of RFID tags can be recognized simultaneously due to its highly advanced anti-collision multi-tag-handling algorithm. The tags feature very low power consumption enabling them to operate effectively for over 6 years without battery replacement. This economical semi-passive RFID tag series provides users with a diverse selection of options and housing designs depending on intended use. This series is compatible with GAO's [UHF RFID Interrogator PC Card model # 227001](#) and [UHF RFID Reader model # 227003](#)



Features

- ✓ 6m read/write distance
- ✓ Allows automated real-time identification, tracking and tracing of assets and people without human intervention
- ✓ 64 bytes data memory
- ✓ Supports both European and North American use
- ✓ 100tags/s identification rate
- ✓ Provides reliable identification of fast-moving objects
- ✓ 2000-tag simultaneous identification
- ✓ Offers visual identification of an addressed tag through LED
- ✓ Non-line-of-sight data transmission
- ✓ 6-year battery life
- ✓ Eliminates RF flooding through software-controlled read/write operations



Specifications

| | | |
|-------------------------|---|-----------------|
| Operating frequency | 868MHz (EC) or 915MHz (NA) ISM band | |
| Read rate | IC code only | Up to 100tags/s |
| | 128bit | Up to 35tags/s |
| Response time | <10ms (single tag) | |
| Read/write range | Up to 6m (at 27dBm ERP with antenna connector) | |
| Data rate | Download to tag | 38.4kbit/s |
| | Upload to reader | 115.2kbit/s |
| Standards/certification | EN 300 220 (EC); FCC Part 15 (US), Industrial Canada | |
| Power source | Lithium battery (not replaceable) | |
| Expect battery life | 6 years at 600 times 64bit readings/day | |
| Battery monitoring | Yes | |
| Option | LED | |
| Data retention | >10 years without power | |
| Write cycles | 100,000 writes to a tag | |
| Memory size | 64 bytes (56-byte user definable) | |
| Identification code | 48 bit fixed ID (one in one trillion) | |
| | Multiple drops to concrete from 1m | |
| Vibration | 3G, 20 sine wave cycles, 5Hz to 150Hz, DIN IEC 68-2-6 | |
| | 5G, noise 5Hz to 1000Hz, 30min DIN IEC 68-2-64 | |
| Enclosure | Plastic (ASA/Luran®s) | |
| Operating temperatures | -20°C to 70°C | |





GAO RFID Inc.

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Celebrating Over 15 Year of Innovation

Product Overview

Semi-Passive RFID Response Tag Series (137005)



GAO Group

GAORFID.com

GAOTek.com

GAORFIDAssetTracking.com

GAOComm.com

GAOInstruments.com

GAOFiberOptics.com

GAOEmbedded.com

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