This active RFID solo reader provides instant report of detected tags while the data from detected tags is transferred by the reader via RS232 or USB.

The solo RFID reader detects and decodes RFID signals from compatible Wavetrend tags. It provides instant report of detected tags while the data from detected tags is sent by the reader via RS232 or USB to authorized corporate computing systems. Tag data is configurable and read range can also be filtered. The reader features extremely low current consumption and can be powered directly from RS232 or externally.

The reader is available in two different models; solo which has an SMA connection to an external antenna and OEM which is a PCB based unhoused reader that includes an on board patch antenna. This active RFID solo reader is ideally suited for customer demos as a standalone unit when connected over USB. It is primarily designed to be integrated with 3rdparty hardware utilizing the RS232 port which makes it an ideal choice for adding Active RFID reading capability to telematic systems.

Key Feature

- Compact Size
- Reader status indication by LED’s at RJ45 connectors
- Certified for FCC and ETSI
- High RF long and short range sensitivity
- USB connection
- RF hardened receiver
- Supports Full RX2XX Protocol
- Two modes of data transmission:
- Hardware auto-polling: tag data provided automatically from Reader network
- Software polling: tag data requested from each reader individually by intelligent edge devices or host application.

Compatibility
This solo reader supports the 214011/214041 protocol including their baud rate ranges. The extremely low current consumption allows the reader to be driven by some RS232 devices directly. Not all RS232 provide sufficient current so, in this event, the reader can be powered via its 2.5mm Power Socket. Despite its small size, the reader is capable of reading tags at ranges from 0.5 to 500m. The Solo reader can be connected to any SMA male antenna or via a SMA to BNC connector.

### Accessory

<table>
<thead>
<tr>
<th>Antenna Type</th>
<th>Read Range</th>
</tr>
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<tbody>
<tr>
<td>304023</td>
<td>⅛ Stub- up to 20m</td>
</tr>
</tbody>
</table>

### Technical Specifications

**Environmental**
- Operating temperature: - 40 °C to 85 °C
- Storage temperature: - 20 °C to 70 °C
- Humidity: 5% to 90% (Non condensing)

**Physical**
- Size: 55 mm x 50 x 28mm
- Weight (unit): 80 grams
- Color: Aluminium Grey
- Material: Aluminium
- Connections: 1 RS232 DB9 socket
Product Overview
Active RFID Solo Reader

214013

1 Mini USB type socket
2.5mm Power socket

<table>
<thead>
<tr>
<th>Radio Frequency</th>
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<tbody>
<tr>
<td>Receive Frequency</td>
<td>433.92 MHz</td>
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<table>
<thead>
<tr>
<th>Modulation</th>
<th>ASK</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF Input</td>
<td>50 Ohm BNC</td>
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<thead>
<tr>
<th>Electrical</th>
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<tbody>
<tr>
<td>Supply Voltage</td>
<td>3.3 V to 15 V DC via power socket</td>
</tr>
<tr>
<td>Max. current consumption</td>
<td>9 mA</td>
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<table>
<thead>
<tr>
<th>Protocol Specification</th>
<th></th>
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<tbody>
<tr>
<td>Standard Data Rate</td>
<td>9,600 to 115,200 (baud rate)</td>
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<tr>
<th>Interface</th>
<th></th>
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<tbody>
<tr>
<td>RS232/USB connectors</td>
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**GAO Group**

[GAORFID.com]

[GAOTek.com]

[GAOResearch.com]

**Toll Free (USA & Canada)**

1-877-585-9555

All Other Areas

416-292-0038

Dial Ext.601 for Sales

Ext.602 for Other Inquiries

sales@GAORFID.com