This ultra high frequency RFID reader module is specially designed for applications that share common requirements for tag support, protocol, performance and security.

This RFID reader module is well-suited for use in anti-counterfeiting, handheld reading or encoding, printing, item-level inventory management, patron management, access control and asset management systems. This practical RFID reader module, model 716001, features high performance, high security and efficient power. It offers investment protection through a flexible and forward-compatible platform. The UHF module supports Alien, STMicro and ISO 18000-6B/6C standards. With a 6dBi linearly polarized antenna, it provides a maximum read distance of 3.5m.

Applications

- Anti-counterfeiting
- Handheld reading/encoding
- Item-level inventory management
- Printing and encoding
- Patron management
- Asset management
- Access control
## Technical Specifications

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Compliance</th>
<th>Current consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>862MHz to 955MHz</td>
<td>FCC 15.247 EN 302-208</td>
<td>Sleep mode: 5 mA</td>
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<tr>
<td></td>
<td>EN 301-489 EN 61000-4-3</td>
<td>Idle mode: 170 mA</td>
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<tr>
<td></td>
<td>AS/NZS 4268:2003 DGT LP002</td>
<td>Scan mode: 800mA @ 27 dBm</td>
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<td>HKTA 1049 IDA TS SRD</td>
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<tr>
<td></td>
<td>MIC 2005-5 RoHS</td>
<td>650mA @ 24 dBm</td>
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<tr>
<td></td>
<td></td>
<td>500mA @ 21 dBm</td>
</tr>
</tbody>
</table>

### Physical CF3 MH3
- **Transponder**
- **Communication rate**
  - EPC C1G1: slow & fast modes
  - EPC C1G2 / ISO 18000-6C: 40, 80
  - ISO 18000-6B: 40 kbps

### Environment
- **Storage temperature**: -30°C to 85°C
- **Operating temperature**: -20°C to 70°C
- **Air Interface protocols**
  - EPC C1G1
  - EPC C1G2 / ISO 18000-6C
  - ISO 18000-6B
  - ISO 18000-6A5

### Output power
- Adjustable 10-27 dBm @ 0.1 dB steps
- Power accuracy: ±1 dBm

### Antenna options
- **50 Ω port with MMCX (female)**
- **VSWR 1.5:1 or lower for best performance**

### Singulation performance
- Up to 50 tags/second (25-35 typical)

### Peripheral I/O connection
- **Read range**
  - Approx. 3.5m with 6 dB linearly polarized antenna
- **7 programmable GPIO pins CF**
- **4 programmable GPIO pins MH**
- **TTL: 9.6-115.2 kbps**
- **SPI mode 1: up to 10MHz**
- **USB 2.0 full speed: 12 Mb/s**
- **I2C: 100/400 KHz**