JADAK’s FM-214R is a fixed mount High Frequency (HF) RFID and barcode module designed for Original Equipment Manufacturers (OEM) who need to easily install RFID, barcode and image capture capabilities into their devices. Its small form fits scanning into applications with tight spaces.

Available with both an RS-232 and USB interface, the FM-214R is available with both standard and custom cables.

The FM-214R’s on-board host processing reduces integration time by incorporating functionality and common features into an easy-to-use protocol. It operates with most RFID tags.

Applications:

- OEM medical equipment
- Flexible manufacturing lines
- Kiosk and Payment Terminals

Features & Benefits:

- RS-232 and USB Interface Availability
- Supports Near Field Communication (NFC) Standards
- Compatible with Variety of Tags

71 mm L x 56 mm W x 31.75 mm H
### Tag Compatibility

<table>
<thead>
<tr>
<th>Tag</th>
<th>Capacity</th>
<th>Manufacturer</th>
<th>Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tag-It™ HF-1</td>
<td>2k</td>
<td>Texas Instruments</td>
<td>ISO15693</td>
</tr>
<tr>
<td>Icode™ SLI-L</td>
<td>1k</td>
<td>NXP</td>
<td>ISO15693</td>
</tr>
<tr>
<td>My-d™</td>
<td>5k</td>
<td>Infineon</td>
<td>ISO1443-A</td>
</tr>
<tr>
<td>SRlx4k</td>
<td>4k</td>
<td>ST Microelectronics</td>
<td>ISO1443-A</td>
</tr>
<tr>
<td>Icode™ 1</td>
<td>1k</td>
<td>NXP</td>
<td>Proprietary</td>
</tr>
<tr>
<td>Ario 370-S</td>
<td>1k</td>
<td>Tagsys</td>
<td>ISO15693</td>
</tr>
<tr>
<td>Mifare™</td>
<td>ID Only</td>
<td>NXP</td>
<td>ISO1443-A</td>
</tr>
<tr>
<td>FerVID FRAM</td>
<td>9k</td>
<td>Fujitsu</td>
<td>ISO15693</td>
</tr>
</tbody>
</table>

### RFID Antenna Interface

- **Frequency**: 13.56MHZ
- **Data Rate**: 26kbps ISO15693, 106K to 848k bps ISO1443
- **RF Power**: 120mW nominal
- **Antenna**: Internal and 50 ohm external antenna port
- **Read Range**: 7 cm internal antenna, 15 cm external antenna

### Near Field Communications (NFC) Compatibility

- **Standards**: NFCIP-1: ISO/IEC18092, NFCIP-2: ISO/IEC21481

### Electrical

- **Communications**: RS-232 up to 115.2K baud, USB Model
- **Power Supply**: 5V +/-10% VDC input
- **Supply Current**: 310mA @ 5V (barcode) and 120mA (RFID)
- **Sleep**: 60μA

### Physical

- **Dimensions**: 71 mm L x 56 mm W x 31.75 mm H

### Environment

- **Operating Temp.**: 0°C to 50°C
- **Humidity**: 95%, Relative Humidity, non-condensing, at 50°C

### Regulatory

- **Certifications**: FCC and CE Compliant
- **Other**: RoHS and WEEE Compliant

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**ABOUT JADAK:**

JADAK, a business unit of Novanta, is a market leader in machine vision, RFID, barcode, printing, and color and light measurement products and services for original equipment manufacturers. The company designs and manufactures embedded detection and analysis solutions that help customers solve unique inspection, tracking, scanning and documenting. The company is ISO 9001 and ISO 13485 registered.

Novanta is a trusted technology partner to OEMs in the medical and advanced industrial technology markets, with deep proprietary expertise in photonics, vision and precision motion technologies.

ThingMagic is the JADAK line of RFID products.

[www.jadaktech.com](http://www.jadaktech.com)