This UHF RFID POS device combines the functionality of 1D/2D bar code scanner, an image capture device and handheld/hands-free UHF RFID reader into one unit.

This UHF RFID POS device combines the functionality of 1D/2D bar code scanner, an image capture device and handheld/hands-free UHF RFID reader into one unit. It can capture virtually any 1D or 2D bar code quickly and easily on paper labels as well as on mobile phone displays providing built-in support for emerging applications. It also enables the capture of UHF RFID tags, 1D, 2D and PDF417 symbologies as well as images and signatures. It provides Remote Scanner Management (RSM) which greatly simplifies configuration, deployment and day-to-day management of the devices reducing operational costs.

The integrated reader offers a new standard for bar code scanner reliability providing the maximum uptime required in the demanding retail environment. It allows retailers to easily implement RFID from the receiving dock to checkout resulting in many benefits including timely re-ordering to eliminate out-of-stock and the associated lost sales, increased inventory turnover, real-time trending analysis for better purchasing decisions that put more of the products customers want on the shelves of in store and the ability to ensure timely replenishment of shelves. Tested to 4 ft/1.2 m drops to concrete ensures dependable performance in spite of inevitable everyday drops and bumps.
Key Features

✓ Innovative hybrid design
✓ Ease of use for both hands-free and handheld scanning
✓ Dynamically switch between modes
✓ Offers best-in-class advanced data capture capabilities for superior application flexibility
✓ Withstands multiple 4 ft./1.2 m drops to concrete
✓ Swipe speed programmable up to 100 inches/254 cm per second
✓ RSM (Remote Scanner Management)
✓ Integrated compact base requires very little real estate, enabling easy deployment in even the most constrained spaces
✓ Extra loud beeper
✓ Extra large LED indicator
✓ Multiple on-board interfaces
✓ Universal cable compatible
✓ Recessed connector in the base minimizes the scanner footprint.

Applications

✓ Retailing
✓ Asset management
✓ Hospitality/Loyalty
✓ Government/Transportation
✓ Healthcare
✓ Pharmacies
✓ Libraries
✓ Enterprise file/document tracking
# Technical Specifications

## Physical Characteristics

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimensions</strong></td>
<td>8.5 in. (max) H x 3.5 in. W x 6 in. D</td>
</tr>
<tr>
<td></td>
<td>21.6 cm (max) H x 8.9 cm W x 15.2 cm D</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>16.4 oz/465 g</td>
</tr>
<tr>
<td><strong>Voltage and Current</strong></td>
<td>Nominal: 5V ±5% VDC @ 1.2 A</td>
</tr>
<tr>
<td><strong>Data Capture Options</strong></td>
<td>1D/2D bar codes and RFID tags</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Twilight Black</td>
</tr>
</tbody>
</table>

## Performance Characteristics

### Imager Mode

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Light Source</strong></td>
<td>Aiming Pattern: 650nm laser diode</td>
</tr>
<tr>
<td></td>
<td>Illumination: 630nm LED</td>
</tr>
<tr>
<td><strong>Imager Field of View</strong></td>
<td>39° H x 25° V</td>
</tr>
<tr>
<td><strong>Roll/Pitch/Yaw</strong></td>
<td>360°, ±65°, ±60°</td>
</tr>
<tr>
<td><strong>Swipe Speed</strong></td>
<td>Programmable up to 100 in./254 cm per second (Horizontal Read Rate)</td>
</tr>
<tr>
<td><strong>Frame Rate</strong></td>
<td>Up to 60 frames per second</td>
</tr>
</tbody>
</table>

### Laser Scanner Mode

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Light Source</strong></td>
<td>650nm LED</td>
</tr>
<tr>
<td><strong>Scan Angle</strong></td>
<td>40° ±3° nominal</td>
</tr>
</tbody>
</table>

### Symbology Decode Capability

**1D**

### PDF417 (and variants):
- PDF417 (Standard, Macro), MicroPDF417 (Standard, Macro), Composite Codes (CC-A, CC-B, CC-C)

### 2D
- TLC-39, Aztec (Standard, Inverse), MaxiCode, DataMatrix/ECC 200 (Standard, Inverse), QR Code (Standard, Inverse, Micro)

### Postal
- U.S. Postnet and Planet, U.K. Post, Japan Post, Australian Post, Netherlands KIX Code, Royal Mail 4 State Customer, UPU FICS 4 State Postal, USPS 4CB, Canadian Post (Postbar)

### Nominal Working Range
- **Handheld**: See chart at bottom
- **Hands-free**: See chart at bottom

### Minimum Resolution
- Code 39 – 4 mil, UPC – 7.8 mil (60%), PDF417 – 5 mil, Datamatrix – 5 mil

*The RFID module is not available for all countries. Please contact us regarding availability.

### RFID
- **Frequency**: 902 - 928 MHz (US, Canada & Mexico); Other countries pending
- **Tag Type**: EPC global Class 1 Gen 2 (ISO 18000-6C)

### Imaging Characteristics
- **Graphics Format Support**: Images can be exported as Bitmap, JPEG or TIFF
- **Image Transfer Speed**: USB 2.0: Up to 12 Megabits/second, RS-232: Up to 115 kb/second
- **Image Transfer Time**: Typical USB application is ~0.2 seconds with a compressed JPEG of 100kb
- **Image Quality**: 120 DPI on a 4 x 6 in./10.2 x 15.2 cm document @ 6.5 in./16.5 cm

### User Environment
- **Operating Temp.**: 32° to 104° F /0° to 40° C
- **Humidity**: 5% to 95% RH (Non-Condensing)
- **Drop Specification**: Withstands multiple 4 ft./1.2 m drops to concrete
### Ambient Light Immunity
- Incandescent – 150 ft. candles (1,600 Lux)
- Sunlight – 8,000 ft. candles (86,000 Lux)
- Fluorescent – 150 ft. candles (1,600 Lux)
- Mercury Vapor – 150 ft. candles (1,600 Lux)
- Sodium Vapor – 150 ft. candles (1,600 Lux)
- Immune to normal or artificial light

### Interfaces

**Interfaces Supported**
- USB, RS-232, RS-485* (Port 9B, Port 5B)
  (*Tag “write” commands are not supported via RS-485)

### Regulatory

**Electrical Safety**
- UL60950-1; CSA C22.2 No. 60950-1; IEC60950-1

**Laser Safety**
- IEC 60825-1; 21CFR1040.10; CDRH Class II; IEC Class 2

**EMI/RFI**
- FCC Part 15 Class B; Canada RSS-210; ICES-003 Class B

**RF Exposure**

### Environmental
- Compliant with RoHS directive 2002/95/EEC

### Regulatory Model Numbers
- 716004-RUS – US Version
- 716004-RWW – Worldwide (Non-US) version

### Nominal Working Range (Handheld):

#### 216026-LR

**Code 39 – 5 mil:**
- 0– 5.0 in. (0 – 12.7 cm)

**UPC/EAN – 10 mil (80%)**
- 0– 13.5 in. (0 – 34.3 cm)

**UPC/EAN – 13 mil (100%)**
- 0– 18 in. (0 – 45.7 cm)

#### 216026-SR

**Code 39 – 5 mil**
- 0– 4.5 in. (0 – 11.4 cm)

**UPC/EAN – 10 mil (80%)**
- 0– 8.5 in. (0 – 21.6 cm)

**UPC/EAN – 13 mil (100%)**
- 0– 10.5 in. (0 – 26.7 cm)

#### 216026-LR/216026-SR
### Nominal Working Range (Hands-free):

<table>
<thead>
<tr>
<th>Code</th>
<th>Working Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDF417 – 6.6 mil</td>
<td>0– 5.0 in. (0 – 12.7 cm)</td>
</tr>
<tr>
<td>Datamatrix – 10 mil</td>
<td>0– 6.0 in. (0 – 15.2 cm)</td>
</tr>
<tr>
<td>216026-LR/216026-SR</td>
<td></td>
</tr>
<tr>
<td>Code 39 – 5 mil</td>
<td>0– 4.5 in. (0 – 11.4 cm)</td>
</tr>
<tr>
<td>UPC/EAN – 10 mil(80%)</td>
<td>0– 7.0 in. (0 – 17.8 cm)</td>
</tr>
<tr>
<td>UPC/EAN – 13 mil(100%)</td>
<td>0– 8.0 in. (0 – 20.3 cm)</td>
</tr>
<tr>
<td>PDF417 – 6.6 mil</td>
<td>0– 4.5 in. (0 – 11.4 cm)</td>
</tr>
<tr>
<td>Datamatrix – 10 mil</td>
<td>0– 4.5 in. (0 – 11.4 cm)</td>
</tr>
</tbody>
</table>

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**GAO Group**

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[GAOREsearch.com](http://GAOREsearch.com)

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