Right Angle, General Purpose Fixed Mount Imager

JADAK’s FM-6 is for applications that require aggressive 1D and 2D barcode scanning, but may also require machine vision image processing functions. Utilizing the only area sensor designed specifically for reading barcodes, the FM-6 has longer product life cycles than devices using off the shelf area sensors. The FM-6’s dual-functionality sensor provides both dedicated black & white mode (ideal for barcode) and color mode (ideal for image analysis).

With motion tolerance up to 584cm (230”) per second, the FM-6 can read barcodes in motion, whether moved mechanically or by hand.

The FM-6’s small compact package is ideal for Original Equipment Manufacturer (OEM) devices, as well as manufacturing or other applications that require a fixed mount scanner.

Applications:

- OEM Medical Devices, such as Clinical Analyzers
- Industrial Robotic Systems
- Kiosks

Features & Benefits:

- Flexible Dual Purpose Sensor Optimized for Both Barcodes and Image Capture and Processing
- Multi-Functional Design Provides 1D/2D Barcode Reading and Machine Vision Capabilities
- Solid-State Electronic Construction for Durability and Reliability
- Long Product Life Cycle

L: 44 mm; W: 25.4 mm; H: 40.3 mm
## Scanning Performance

<table>
<thead>
<tr>
<th><strong>Sensor</strong></th>
<th>CMOS, Global Shutter, 844 x 640 pixel resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Illumination</strong></td>
<td>617 nm visible Red LED (White LED available on color units)</td>
</tr>
<tr>
<td><strong>Aiming</strong></td>
<td>528 nm visible Green LED</td>
</tr>
<tr>
<td><strong>Typical Frame Rate</strong></td>
<td>60 frames per second, b&amp;w and color</td>
</tr>
<tr>
<td><strong>Motion Tolerance</strong></td>
<td>Up to 584 cm/sec (230 in/sec) in total darkness with .013” UPC at 4°</td>
</tr>
</tbody>
</table>

### Field of View
- SR Optics: Horizontal: 42.4°, Vertical: 33.0°
- ER Optics: Horizontal: 31.6°, Vertical: 24.4°
- HD Optics: Horizontal: 41.4°, Vertical: 32.2°

### Scan Angles
- Tilt: 360°, Pitch: ± 45°, Skew: ± 65°

### Symbol Contrast
- 20% minimum reflectance

### Barcode Resolution
- Down to 3 mil (.003")

### Symbologies
- **2D Stacked**: PDF417, MicroPDF417, GS1 Composite
- **2D Matrix**: Aztec Code, Data Matrix, MaxiCode, QR Code, Micro QR Code, Chinese Sensible (Han Xin) code
- **Postal**: Australian Post, British Post, Canadian Post, Japanese Post, Netherlands (KIX) Post, Planet Code, Postnet, Intelligent Mail Barcode, Postal-4i
- **OCR**: OCR-A, OCR-B, E13B (MICR) (OCR Optional)

## Regulatory
- FCC Class B, CE
- RoHS compliant
- EMC Directive 2014/30/EU FCC Part 15” Class B

## Mechanical/Electrical
- **Interface**: True RS232, USB 1.1 (HID COMM or Keyboard)
- **Input Voltage**: 5 VDC ±5%
- **Typical Current Draw**: <500mA

## Environmental
- **Temperature**: Operating: -25°C to 50°C; Storage -40°C to 70°C
- **Humidity**: 0 - 95% Relative Humidity, non-condensing, at 50°C
- **Ambient Light**: 0-100,000 lux (total darkness to bright sunlight)

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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.

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

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