

# 5X00 Series

## Miniature Image Scan Engines

5000 LED Aimer/5100 High-Visibility LED Aimer/5300 Laser Aimer

The 5X00 family combines the latest CMOS industrial-grade image sensor technology, illumination and optics to create a compact, lightweight optical module capable of reading linear, stacked linear and matrix barcodes. In addition, these imagers can read and decode OCR fonts and capture digital images.

Our fifth generation of image engines builds on the Honeywell legacy of reading the most comprehensive list of barcode symbologies and value-added image capture and OCR reading capability. Honeywell has a long history of supplying OEM devices to the barcode reading industry. Our commitment to applying innovative image-based processing to traditional barcode applications will help ease your transition to image-based readers. In addition, our partnership-friendly culture and sensitivity to lifecycle management helps you manage your engine integration and evolution to ensure that your devices always have the latest and best technology available.

These full omnidirectional readers are available in many configurations to meet your integration needs. Several focal distances, mounting options, aiming ergonomics and decoder license configurations are available.



### *Optical Subassembly and Licensed Decoder*

These options help integrators incorporate the benefits of image capture into a wide variety of devices including barcode scanners, handheld mobile computers, medical instrumentation, diagnostic equipment, gaming terminals, vending machines and robotics. These options help integrators incorporate the benefits of image capture into a wide variety of devices including barcode scanners, handheld mobile computers, medical instrumentation, diagnostic equipment, gaming terminals, vending machines and robotics.

## FEATURES & BENEFITS



Adaptus™ Imaging Technology delivers superior value through versatility and performance and embodies Honeywell's continuous commitment to leading technology, superior solutions and helping business customers solve their data capture problems.



The small, lightweight and compact package minimizes integration hassles into legacy and next-generation devices.



Available in high-visibility LED and laser aimer versions, these omnidirectional area imagers make reading linear and full-matrix codes quick and easy with industry-leading motion tolerance, low light sensitivity and broad depth-of-field reading distances.



Because they incorporate industrial-grade image sensor technology and are designed with no moving parts, these imagers can withstand rugged applications and sub-zero freezing temperatures.



Based on a history of applying image-based technology to reading barcodes, these engines bring a legacy of industry-leading image processing performance. In addition to reading barcodes well, these products also capture crisp digital images for use in your data collection system.

# 5X00 Series Technical Specifications

## PERFORMANCE

**Focal Point:** SR: 17.8 cm (7 in) from lens plate; SF: 11.4 cm (4.5 in) from lens plate

**Working Range:**

	8.3 mil Linear (.020 cm)	10 mil PDF417 (.025 cm)	13 mil UPC (.033 cm)	15 mil Data Matrix (.038 cm)	15 mil QR (.038 cm)	35 mil MaxiCode (.089 cm)
<b>SR* NEAR</b>	8.9 cm (3.5 in)	7.9 cm (3.1 in)	5.3 cm (2.1 in)	5.8 cm (2.3 in)	7.9 cm (3.1 in)	5.1 cm (2.0 in)
<b>SR* FAR</b>	19.3 cm (7.6 in)	22.9 cm (9.0 in)	33.5 cm (13.2 in)	25.9 cm (10.2 in)	22.4 cm (8.8 in)	33.0 cm (13.0 in)
	6.6 mil PDF417 (.017 cm)	7.5 mil Linear (.019 cm)	8.3 mil Data Matrix (.021 cm)	8.3 mil QR (.021 cm)	10 mil Linear (.025 cm)	13 mil UPC (.033 cm)
<b>SF* NEAR</b>	7.1 cm (2.8 in)	6.4 cm (2.5 in)	8.6 cm (3.4 in)	8.6 cm (3.4 in)	5.6 cm (2.2 in)	5.1 cm (2.0 in)
<b>SF* FAR</b>	15.2 cm (6.0 in)	16.5 cm (6.5 in)	14.5 cm (5.7 in)	13.7 cm (5.4 in)	19.3 cm (7.6 in)	22.6 cm (8.9 in)

\* Data characterized at 23°C (73.4°F) and 0 lux ambient light

**Image Sensor:** 752 x 480 CMOS sensor

**Motion Tolerance:** 10.2 cm (4 in) per second

**Rotational Sensitivity:** 360°

**Viewing Angle:** 40°

**Ambient Light:** Total darkness to 100,000 lux (full sunlight)

**Illumination LEDs:** 626 nm ±30 nm

**Aiming:** LEDs: 526 nm ±30 nm;

Laser: 650 nm ±10 nm

## SYMBOLOGIES

**2D:** PDF417, MicroPDF417, MaxiCode, Data Matrix, QR Code, Aztec, Aztec Mesa, Code 49, UCC Composite

**Linear:** Code 39, Code 128, Codabar, UPC, EAN, Interleaved 2 of 5, RSS, Code 93, Codablock

**Postal:** Postnet (U.S.), Planet Code, BPO 4 State, Canadian Post, Japanese Post, KIX (Netherlands) Post

**OCR Fonts:** OCR-A, OCR-B

## MECHANICAL

**Size (D x W x H) (without mounting tabs):**

**5000:** 14.33 mm x 20.57 mm x 11.43 mm (0.564 in x 0.810 in x 0.450 in)

**5100:** 14.33 mm x 20.57 mm x 11.43 mm (0.564 in x 0.810 in x 0.450 in)

**5300:** 1.78 cm x 2.79 cm x 1.21 cm (0.7 in x 1.1 in x 0.475 in)

**Weight:**

**5000:** 4.96 grams (0.175 ounces)

**5100:** 4.96 grams (0.175 ounces)

**5300:** 5.9 grams (0.21 ounces)

## ELECTRICAL

**Operational Input Voltage:**

**Imager:** 3.3 VDC +5% (23°C/73.4°F)

**Illumination + Aimer 5000/5100:** 3.0 VDC to 6.0 VDC (23°C/73.4°F)

**Illumination + Aimer 5300:** 3.0 VDC to 5.5 VDC (23°C/73.4°F)

**Current Draw:** Imager: Maximum Operating Current – 100 mA, Standby Current – 100 uA

**Postal:**

**Average Current (Interlaced Mode)5X00:** 150 mA

**Standby Current:** 500 uA

**Peak:** 350 mA

## ENVIRONMENTAL

**Operating Temperature:** -30°C to 50°C (-22°F to 122°F)

**Storage Temperature:** -40°C to 70°C (-40°F to 158°F)

**Humidity:** up to 95% RH, non-condensing at 50°C (122°F)

**Shock:** 18 shocks of 3,500 G for .5 msec at 23°C (73°F)

**Vibration:** 10 G over a frequency range of 5 Hz to 500 Hz; 1 G over a frequency range of 500 Hz to 2,000 Hz

For a complete listing of all compliance approvals and certifications, please visit

[www.honeywellaidc.com/compliance](http://www.honeywellaidc.com/compliance).

For a complete listing of all supported barcode symbologies, please visit [www.honeywellaidc.com/symbologies](http://www.honeywellaidc.com/symbologies).

## For more information

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

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