

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 bar codes. 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 bar code symbologies and value added image capture and OCR reading capability. Honeywell has a long history of supplying OEM devices to the bar code reading industry. Our commitment to applying innovative image based processing to traditional bar code applications will help ease your transition to image based readers. In addition, our partnership friendly culture and sensitivity to life cycle management helps you manage your engine integration and evolution to ensure your devices always have the latest and best technology available.

These full omni-directional readers are available in configurations to meet your integration needs. Several focal distances, mounting options, aiming ergonomics, and decoder license configurations are available. These options help integrators incorporate the benefits of image capture into a wide variety of devices including bar code scanners, handheld mobile computers, medical instrumentation, diagnostic equipment, gaming terminals, vending machines, and robotics.



Optical Subassembly and
Licensed Decoder

Features

- **Powered by Adaptus® Imaging Technology:** 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
- **Small, Lightweight and Versatile:** Compact package minimizes integration hassles into legacy and next generation devices
- **Point and Shoot Ease of Use:** Available in high visibility LED and laser aimer versions, these omni-directional 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
- **Durable:** 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.
- **Fifth Generation Imaging:** Based on a history of applying image-based technology to reading bar codes, these engines bring a legacy of industry-leading image processing performance. In addition to reading bar codes well, these products also capture crisp digital images for use in your data collection system.

5X00 Series Technical Specifications

Performance

Focal Point: SR: 7" (17.8 cm) from lens plate; SF: 4.5" (11.4 cm) 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)
SR* Near	3.5" (8.9 cm)	3.1" (7.9 cm)	2.1" (5.3 cm)	2.3" (5.8 cm)	3.1 in. (7.9cm)	2.0 in. (5.1cm)
SR* Far	7.6" (19.3 cm)	9" (22.9 cm)	13.2" (33.5 cm)	10.2" (25.9 cm)	8.8 in. (22.4cm)	13.0 in. (33cm)
	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 (.025cm)	13 mil UPC (.033cm)
SF* Near	2.8" (7.1 cm)	2.5" (6.4 cm)	3.4" (8.6 cm)	3.4" (8.6 cm)	2.2 in. (5.6cm)	2.0 in. (5.1cm)
SF* Far	6" (15.2 cm)	6.5" (16.5 cm)	5.7" (14.5 cm)	5.4" (13.7 cm)	7.6 in. (19.3cm)	8.9 in. (22.6cm)

*Data characterized at 23°C and 0 lux ambient light

Image Sensor: 752 x 480 CMOS sensor

Motion Tolerance: 4" (10.2 cm) 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

2 Dimensional: 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 (US), Planet Code, BPO 4 State, Canadian Post, Japanese Post, KIX (Netherlands) Post

OCR Fonts: OCR-A, OCR-B

Mechanical

	5000	5100	5300
Size (D x W x H): (without mounting tabs)	.564" x .810" x .450" (14.33 mm x 20.57 mm x 11.43 mm)	.564" x .810" x .450" (14.33 mm x 20.57 mm x 11.43 mm)	.7" x 1.1" x .475" (1.78 cm x 2.79 cm x 1.21 cm)
Weight:	.175 ounces (4.96 grams)	.175 ounces (4.96 grams)	.21 ounces (5.9 grams)

Electrical

Operational Input Voltage: Imager: 3.3 VDC + 5% (23°C)
Illumination + Aimer 5000/5100: 3.0 VDC to 6.0 VDC (23°C)
Illumination + Aimer 5300: 3.0 VDC to 5.5 VDC (23°C)

Current Draw: Imager: Maximum Operating Current – 100 mA, Standby Current – 100 µA

Average Current (Interlaced Mode) 5X00: 150 mA	Standby Current 500 uA	Peak 350mA
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Environmental

Operating Temperature: -30° to 50°C (-34° to 122°F)

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

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

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

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

For more information:

www.honeywellaidc.com

Security & Data Collection

Honeywell Scanning & Mobility

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