

## IS4920

**Metrologic's IS4920 miniature decoded area imaging engine easily integrates with a wide range of OEM devices whose applications demand a robust omnidirectional scanning performance.**

Built with Metrologic's advanced area imager and industrial standard form factor, the IS4920 provides an effective solution for capturing high-quality images and decoding bar codes in existing and new applications associated with mobile computers, hand-held scanners, self-service and payment kiosks, identity verification, medical/diagnostic instruments and lottery terminals.

The imager features a mega-pixel CMOS sensor and patented *FirstFlash*<sup>™</sup> technology. A wide-angle lens scans twice the area of competing models. An integrated aiming LED helps users guide targets into scan zone. The decode board is loaded with *SwiftDecoder*<sup>™</sup> software which

delivers unrivaled decoding capability, speed and aggressiveness, especially when scanning damaged, poorly-printed or wrinkled codes. IS4920 decodes the widest set of symbologies and reads OCR fonts (A, B and MICR).

IS4920 consumes about half of the power of a typical competing model.

The imager and decode board can be ordered as an assembled module or separate components. The decode board supports 3 – 5.5 volt power inputs and TTL-level RS232 or USB communication.

Since its open-system architecture allows third-party and custom plug-ins, the IS4920 has virtually unlimited application flexibility. The IS4920 is also compatible with MetroSet2 PC-based software for easy configuration and flash upgrades.

[www.metrologic.com/IS4920](http://www.metrologic.com/IS4920)

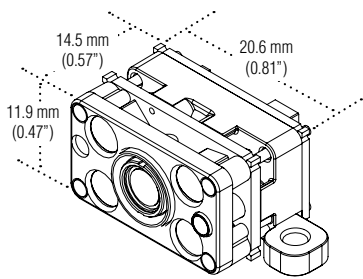


### Features

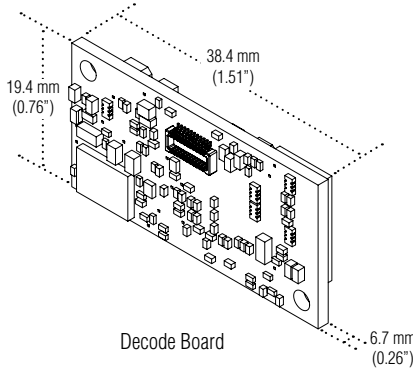
- Mega Pixel Imaging Sensor
- Wide Angle Lens Design
- *FirstFlash*<sup>™</sup> Technology
- *SwiftDecoder*<sup>™</sup> Software
- Code Select<sup>™</sup>

### Benefits

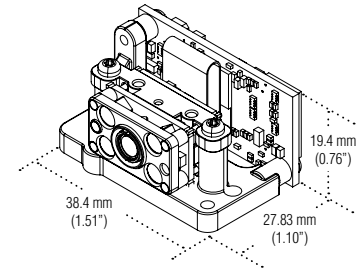
- Captures high resolution images for decoding bar codes or upload
- Covers a large scanning area for easy scanning experience
- Increases productivity by scanning on first LED flash
- Decodes all standard 1D and 2D codes - even wrinkled, damaged or poorly printed – quickly and accurately
- Scans up to seven bar codes in one flash and then outputs in any pre-configured order



Imager



Decode Board



Bracketed Module

## OPERATIONAL

|                   |  |
|-------------------|--|
| Image sensor      | CMOS, 1.23 mega pixel  |
| Decode Capability | All standard 1D and 2D symbologies<br>Optional OCR fonts (A, B and MICR) |
| System Interfaces | TTL RS232, USB   |
| Illumination      | 650 nm LED   |
| Aiming            | 615 nm LED   |

## MECHANICAL

|                    | Imager (no mounting tab):           | Decode Board:   | Bracketed Module: |
|--------------------|-------------------------------------|-----------------|-------------------|
| Height             | 11.9 mm (0.47")                     | 19.4 mm (0.76") | 19.4 mm (0.76")   |
| Depth              | 14.5 mm (0.57")                     | 6.7 mm (0.26")  | 27.83 mm (1.10")  |
| Width              | 20.6 mm (0.81")                     | 38.4 mm (1.51") | 38.4 mm (1.51")   |
| Weight             | 5 g (0.17 oz)                       | 4 g (0.14 oz)   | 14 g (0.49 oz)    |
| Engine Termination | 12-POS connector (Molex 52559-1252) |                 |                   |

## ELECTRICAL

|  |                            |
|--|----------------------------|
| Input Voltage                                  | 3.0 - 5.5 VDC              |
| Typical Current Draw @ 3.3 VDC & 25° C (77° F) |                            |
| Average Operating                              | 235 mA                     |
| Peak   | 400 mA                     |
| Idle   | 160 mA                     |
| Suspend  | 600 µA                     |
| EMC  | FCC Class B, CISPR Class B |

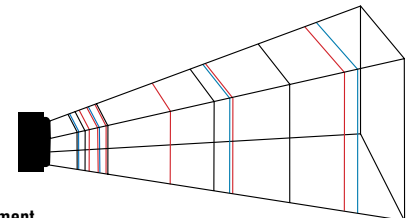
## ENVIRONMENTAL

|                       |  |
|-----------------------|--|
| Operating Temperature | 0°C - 40°C (32°F - 104°F)  |
| Storage Temperature   | -20°C - 70°C (-4°F - 158°F)  |
| Humidity              | 0% - 95% relative humidity, non-condensing   |
| Light Levels          | 0 - 100,000 lux (total darkness - direct sunlight)   |
| Shock                 | 7 G over 10 - 500 Hz   |
| Drop                  | Designed to withstand repeated 1.5 m (5') drops to concrete floors when mounted inside a scanner case. |

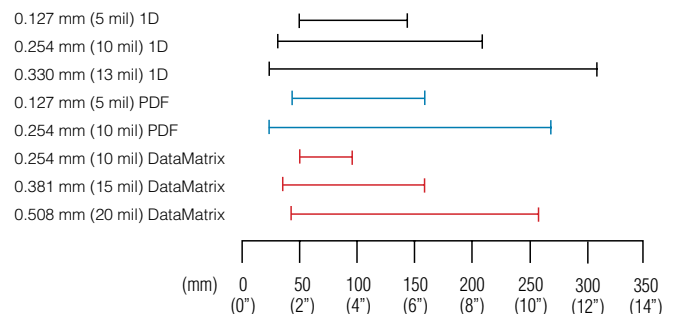
## SCAN PERFORMANCE

|                            |   |
|----------------------------|---|
| Depth of Field*            | 25 mm – 310 mm, (1 - 12.2") for 100% UPC  |
| Width of Scan Field*       | 118 mm (w) x 86 mm (h) (4.7" w x 3.5" h) @ 127 mm (5"); 237 mm (w) x 172 mm (h) (9.3" w x 6.8" h) @ 254 mm (10") from engine face |
| Minimum Element Width, 1D* | 0.102 mm (4 mil)  |
| Minimum Element Width, 2D* | 0.254 mm (10 mil), Data Matrix  |
| Resolution                 | 1280 x 960 pixels   |
| Print Contrast             | 20% minimum reflectance difference  |
| Scan Pattern               | Area  |
| Focal Point                | 100 mm (3.94") from the imager face   |
| View Angles                | 50° (horizontal), 37.5° (vertical)  |

## Scan Ranges\*



### Bar Code Minimum Element



\*Measured at 25° C and under normal light conditions



Revision: All



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