Metrologic®
We really work for you.™

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 First*Flash*™ 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 Swift*Decoder*™ 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.
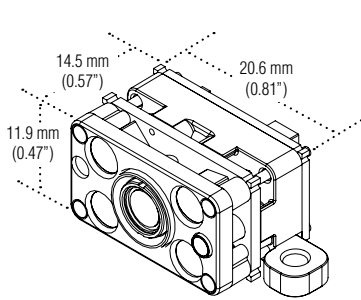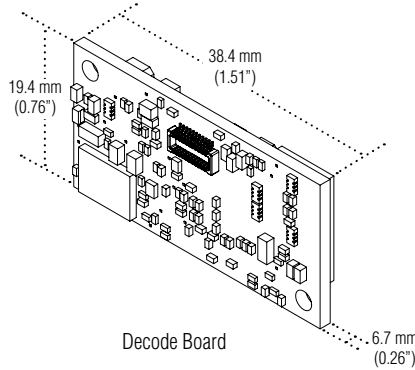
www.metrologic.com/IS4920

Features	Benefits
• Mega Pixel Imaging Sensor	Captures high resolution images for decoding bar codes or upload
• Wide Angle Lens Design	Covers a large scanning area for easy scanning experience
• First*Flash*® Technology	Increases productivity by scanning on first LED flash
• Swift*Decoder*™ Software	Decodes all standard 1D and 2D codes - even wrinkled, damaged or poorly printed – quickly and accurately
• Code*Select* ™	Scans up to 7 bar codes in a single flash and outputs in any pre-determined order

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Imager

14.5 mm (0.57")
20.6 mm (0.81")
11.9 mm (0.47")

Decode Board

38.4 mm (1.51")
19.4 mm (0.76")
6.7 mm (0.26")

Bracketed Module

19.4 mm (0.76")
38.4 mm (1.51")
27.83 mm (1.10")
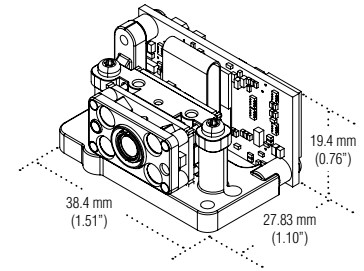
OPERATIONAL

Image sensor	CMOS, 1.23 mega pixel
Decode Capability	All standard 1D and 2D symbologies 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

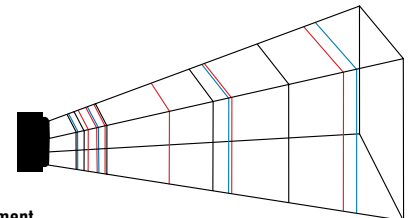|	
Input Voltage	3.0 - 5.5 VDC
Typical Current Draw @ 3.3 VDC & 25° C (77° F)	
Average Operating	235 mA
Peak	400 mA
Idle	160 mA
Suspend	600 µA
EMC	FCC Class B, CISPR Class B

ENVIRONMENTAL

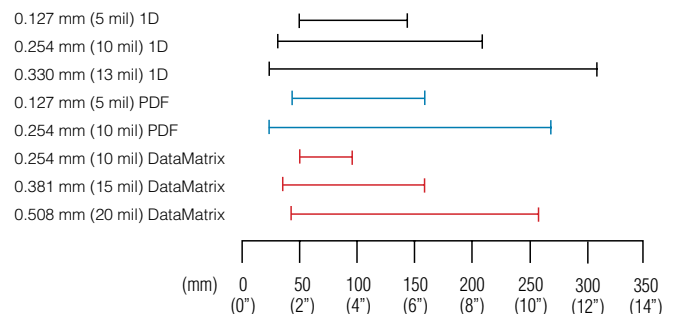|	
Operating Temperature	0ºC - 40ºC (32ºF - 104ºF)
Storage Temperature	-20ºC - 70ºC (-4ºF - 158ºF)
Humidity	0% - 95% relative humidity, non-condensing
Light Levels	0 - 100,000 lux (total darkness - direct sunlight)
Shock	7 G over 10 - 500 Hz
Drop	Designed to whistand repeated 1.5 m (5') drops to concrete 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

0.127 mm (5 mil) 1D
0.254 mm (10 mil) 1D
0.330 mm (13 mil) 1D
0.127 mm (5 mil) PDF
0.254 mm (10 mil) PDF
0.254 mm (10 mil) DataMatrix
0.381 mm (15 mil) DataMatrix
0.508 mm (20 mil) DataMatrix

(mm) 0 (0") | 50 (2") | 100 (4") | 150 (6") | 200 (8") | 250 (10") | 300 (12") | 350 (14")

*Measured at 25° C and under normal light conditions

RoHS 2002/95/EC — Revision: All   C**UL**US   ISO 9001:2000

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DS4920