

ISM-AR0144

MIPI SENSOR MODULE

The iENSO MIPI sensor module ISM-AR0144 is perfectly adaptable to iENSO's embedded ecosystem of SOMs, vision systems, and wireless connectivity modules.

The ISM-AR0144 uses ON Semi's AR0144 sensor with advanced technology by providing high sensitivity, high image quality, high dynamic range, high reliability, low noise, low power, and compact package footprint to match specific application requirements.

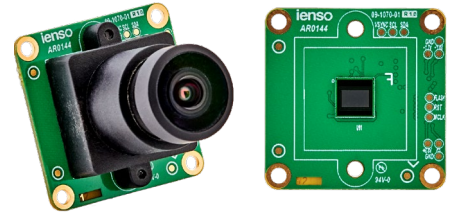
The ON Semi AR0144 **global shutter** sensor features a type 1/4" color CMOS with 1.0M effective pixel to achieve 1200 x 800 resolution, which performs well with iENSO's multiple lens types.

APPLICATIONS

- Medical & Biometrics
- Home Automation
- Robotics and Drone cameras
- Night Vision
- IoT and Embedded vision

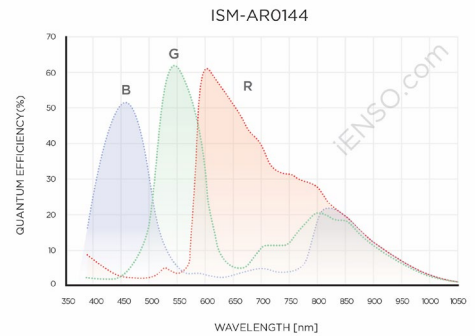
KEY SPECIFICATIONS

- Framerate details: 1.0M at 60 fps or 720p at 66 fps over a 2-lane MIPI CSI-2 12-bit interface.
- Pixel details: 3.0 μm , 1200 x 800 array, color or mono, global shutter, front illuminated, CRA 0°/20°/28°.
- Package/Environmental: 69-ball CSP, 5.6 mm x 5.6 mm. Temp. range -40°C to 85°C.
- Power consumption 215 mW.



Width: 26mm
Height: 26mm

SPECTRAL RESPONSE - COLOR



SPECTRAL RESPONSE - MONOCHROME



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Maker	ON Semi	Silicon Optonics		ON Semi	Sony	OmniVision	Sony
Sensor	AR0144	JX-F22	JX-K02	AR0521	IMX326	OV8865	IMX317
Megapixels (MP)	1.0	2.1	4.1	5.0	6.8	8.0	8.5
Frame Rate (fps)	60	60	60	60	30	30	60
Optical Format (inch)	1/4	1/2.7	1/2.7	1/2.5	1/2.9	1/3.2	1/2.5
Pixel size (µm)	3.0	3.0	2.2	2.2	1.62	1.4	1.62
Benefits	<ul style="list-style-type: none"> • HDR • Low Light • Near IR enhanced 	<ul style="list-style-type: none"> • HDR • Low light 	<ul style="list-style-type: none"> • On-chip ISP • HDR • Low light 	<ul style="list-style-type: none"> • HDR • BSI • Low light 	<ul style="list-style-type: none"> • BSI • Low light • HDR • Near IR enhanced 	<ul style="list-style-type: none"> • BSI 	<ul style="list-style-type: none"> • HDR • BSI

THE RIGHT EMBEDDED VISION SYSTEM FOR YOUR APPLICATION

CONSISTENT QUALITY: From six-axis lens alignment to consistently accurate color quality, to AI and ubiquitous connectivity, we guarantee that every iENSO embedded vision system will perform to spec.

SECURE SUPPLY: With iENSO engineers on the floor in all of our manufacturing partner facilities, we guarantee the quality and quantity of supply you need to make your application a success.

COMPELLING ECONOMICS: With our years of experience in the design and development of industrial, machine and consumer vision technologies, we can provide a cost-effective, no compromise embedded vision solution for your application.

ABOUT iENSO

Established in 2003, iENSO provides imaging and wireless solutions that are helping global brands take their products to the next level in the age of embedded systems and AI platforms. iENSO accelerates the deployment of innovative imaging and wireless products in a wide range of verticals such as IoT, home automation, automotive,

drones, professional entertainment, robotics, remote surveillance and security. With offices in Canada and China, iENSO has perfected the engineering ecosystems that exist between initial design and high-volume manufacturing.



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