

# ISM-IMX377

## MIPI SENSOR MODULE

The iENSO ISM-IMX377 is the quality leader MIPI sensor module that adapt to iENSO's embedded ecosystem of SOMs, camera modules, and wireless connectivity modules.

The ISM-IMX377 uses SONY's IMX377 sensor, with advanced technologies, including Digital Overlap High Dynamic Range to output brilliant colors and Scalable Low Voltage Signaling Embedded Clock for high speed and multi-stream output.

The SONY IMX377 sensor features a type 1/2.3" color CMOS with 8.3M effective pixel to achieve true 4K UHD resolution with digital overlap HDR technology and it's suitable for various iENSO lens types.

### APPLICATIONS

- Action cameras
- AR/VR
- After-market automotive
- Teleconference
- Embedded vision

### KEY SPECIFICATIONS

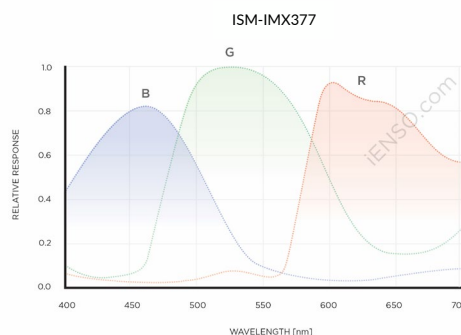
- Framerate: 60 fps at UHD, 12 bits (120 fps at FHD, 10 bits) over 4/8-lane MIPI CSI-2 interface for RAW10/RAW12 data output.
- Pixel details: 2.0x2.0  $\mu\text{m}$ , 3840 x 2160 array (16:9 format), STARVIS BSI, ME/DOL-HDR, rolling shutter.
- Package/Environmental: Ceramic LGA with 128 pins, -10°C to 60°C sensor ambient guaranteed performance temperature.



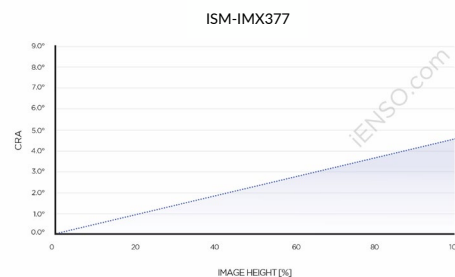
iENSO



### SPECTRAL RESPONSE



### CHIEF RAY ANGLE



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Maker	ON Semiconductor		Silicon Optronics		ON Semi	OmniVision	Sony	Sony
Sensor	AR0144	AR0130	JX-F22	JX-K02	AR0521	OV8865	IMX317	IMX377
Megapixels	1.0	1.2	2.1	4.1	5.0	8.0	8.3 (4K)	8.3 (4K)
Fps	60	45	60	60	30	30	32.8	32.8
Optical format	1/4	1/3	1/2.7	1/2.6	1/2.5	1/3.2	1/2.5	1/2.3
Pixel size (Mm)	3.0	3.75	3.0	2.2	2.2	1.4	1.62	1.55
Benefits	Stop motion Very compact Low power	Large pixels Low-light use Near-IR	Automatic Compact Low power	Automatic On-chip ISP Compact	Low light HDR LSC	Low power Very robust Compact	True 4K UHD image quality DOL-HDR	True 4K UHD image quality DOL-HDR
Applications	Biometrics VR/AR Drones	Gaming Security near-IR	Security Action In-car Drones	Security Facial- Recognition	In-car Action Industrial Security	VR/AR Wearables Drones In-car	Action VR/AR In-car	Action VR/AR In-car IoT

## 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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