

# 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, vision systems, and wireless connectivity modules.

The ISM-IMX377 uses SONY's IMX377 sensor, with HDR and advanced backside-illuminated structure, to reach high sensitivity and realize high quality.

The SONY IMX377 sensor features a type 1/2.3" color CMOS with 12.35M effective pixel with digital overlap HDR technology and it's suitable for various types of iENSO lenses.

### APPLICATIONS

- Action cameras
- Medical cameras
- After-market automotive
- Robotic and drone cameras
- Industrial
- IoT & Embedded vision

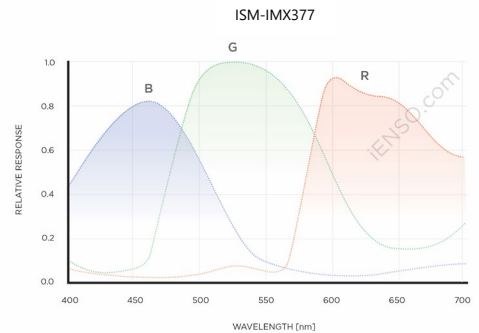
### KEY SPECIFICATIONS

- Framerate: 35 fps at 12MP, 12 bits (60 fps at 8.29MP, 10 bits) over MIPI CSI-2 interface for RAW data output.
- Pixel details: 1.55x1.55  $\mu\text{m}$ , 4024 x 3036 array (4:3 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.

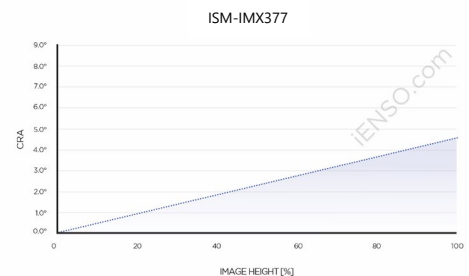


Width: 26mm  
Height: 26mm

### SPECTRAL RESPONSE



### CHIEF RAY ANGLE



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Maker	ON Semi	Silicon Optonics		ON Semi	Sony	OmniVision	Sony
Sensor	AR0144	JX-F22	JX-K02	AR0521	IMX326	OV8865	IMX377
Megapixels (MP)	1.0	2.1	4.1	5.0	6.8	8.0	12.35
Frame Rate (fps)	60	60	60	60	30	30	35
Optical Format (inch)	1/4	1/2.7	1/2.7	1/2.5	1/2.9	1/3.2	1/2.3
Pixel size (μm)	3.0	3.0	2.2	2.2	1.62	1.4	1.55
Benefits	<ul style="list-style-type: none"> <li>• HDR</li> <li>• Low Light</li> <li>• Near IR enhanced</li> </ul>	<ul style="list-style-type: none"> <li>• HDR</li> <li>• Low light</li> </ul>	<ul style="list-style-type: none"> <li>• On-chip ISP</li> <li>• HDR</li> <li>• Low light</li> </ul>	<ul style="list-style-type: none"> <li>• HDR</li> <li>• BSI</li> <li>• Low light</li> </ul>	<ul style="list-style-type: none"> <li>• BSI</li> <li>• HDR</li> <li>• Near-IR enhanced</li> </ul>	<ul style="list-style-type: none"> <li>• BSI</li> </ul>	<ul style="list-style-type: none"> <li>• HDR</li> <li>• BSI</li> </ul>

## 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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