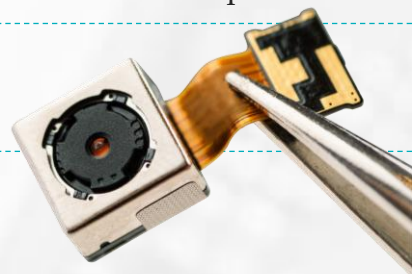
INV-AR0246FF-2MP

2MP RGB Rolling Shutter Camera Module

The INV-AR0246-2MP camera module is based on the OnSemi AR0246 color CMOS 2-megapixel image sensor with M12 mount lens. The AR0246 belongs to onsemi's Hyperlux LH product family, it's a 1/4−inch Back-Side Illuminated (BSI) Stacked CMOS digital image sensor with a 1920 x 1080 active−pixel array. This advanced sensor captures images in either linear, enhanced Dynamic Range (eDR) or embeded High Dynamic Range (eHDR with 120dB) modes, with a rolling−shutter readout.
The AR0246 has Adaptive Local Tuning Mapping (ALTM) inside to support low cost ISP with excellent image quantity. It is supported by a 2.0 µm BSI pixel from onsemi and delivers excellent performance in lowlight & NIR wavelengths. The sensor includes advanced functions such as Wake On Motion (WOM), Line Interleaved HDR (LI-HDR), eDR and eHDR. With eHDR+ALTM, it makes AR0246 highly suitable for a variety of applications including facial recognition, carDVR and security camera and Wearables.

- Stacked BSI architecture designed for high-performance low-light and NIR imaging.
- Captures up to 120 dB with on-sensor eHDR and ALTM processing.
- Precise characterization of shading, distortion, and intrinsic/extrinsic parameters.
- Supports ERS and Global Reset Release (GRR) for versatile motion capture.
- Optimized Auto Exposure, White Balance, WOM.
- Optimized for facial recognition and vision systems.
- Super Low Power (SLP) mode for extended operation in battery-powered devices.



Resolution	Sensor Vendor	Image Sensor	Interface	Focus	Optical Size	EFL	FOV (degrees)	Focus Range	Optical Distortion	Module Size (mm)	Application
2MP	OnSemi	AR0246	MIPI	FF	1/4”	3.6	D=73, H=61, V=34	70cm~∞	<-6%	22x21mm	Security & Surveillance