



Robot Vacuum Cleaners

AR / VR / MR

OGOVE

VGA Product Brief



New-Generation Global Shutter CMOS Image Sensor for Mainstream AR/VR/MR and Metaverse

The OGOVE global shutter (GS) CMOS image sensor is a small-form-factor, high-sensitivity device for AR/VR/MR, metaverse, machine vision, and barcode scanner applications.

The OGOVE image sensor has a sensitive 3.0-micron pixel based on OMNIVISION's OmniPixel®3-GS technology. The sensor's global shutter pixel architecture and excellent low-light sensitivity allow it to be used for any application requiring simultaneous localization and mapping (SLAM), gesture detection, head and eye tracking, and depth and motion detection.

The OGOVE has 640 x 480 resolution and comes in a 1/7.5-inch optical format. It has very low power consumption, at less than 34 mW when running at 60 frames per second (fps) with VGA.

The sensor supports one-lane MIPI D-PHY at up to 800 Mbps. It comes in OMNIVISION's CSP package or as bare die.

Applications

- Augmented and virtual reality
- Gaming
- Machine vision
- Industrial automation
- Biometric authentication
- 3D imaging
- Industrial bar code scanning

Features

- **Active array size:** 640 x 480
- **Maximum image transfer rate:**
 - 640 x 480: 120 fps
 - 400 x 400: 140 fps
 - 200 x 200: 280 fps
 - 100 x 100: 420 fps
- **Power supply:**
 - Analog: 2.6V ~ 3.0V
 - Core: 1.2V ±5%
 - I/O: 1.7V ~ 3.0V
- **Output interfaces:**
 - 1-lane MIPI serial output interface
- **Output formats:** 8/10-bit RAW
- **Lens size:** 1/7.5"
- **Pixel size:** 3.006 μm x 3.006 μm

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