

OV9238

720p Product Brief



Small 720p High Definition CMOS Image Sensor for Windows Hello 940 nm and Thin Bezel Notebooks

The OV9238 is an ultra-compact and power efficient CameraChip™ CMOS image sensor designed for slim notebooks, tablets, handsets, and other devices that require a thin bezel.

Built on OMNIVISION's PureCel® technology, and combined with Nyxel® NIR (near-infrared) sensor technology, the OV9238 delivers premium quality images and HD video, while consuming significantly less power than previous generation image sensors.

OMNIVISION's 1/9-inch OV9238 is capable of capturing crisp 720p HD video at 30 frames per second (fps) or VGA video at 45 fps, while consuming approximately 25% less power than the previous generation 720p sensor.

Additionally, the OV9238 meets the video quality specifications for Windows Hello 940 nm.

To fit ultra-thin bezel devices, the OV9238 comes in a compact package that can meet 3.0 mm z-height and has a 47% smaller y-dimension compared to the previous generation 720p sensor.

The OV9238 Nyxel® sensor is also available as a dedicated IR camera solution for facial recognition and other biometric applications with the max 940 nm QE up to 27%.

The OV9238 is available in CSP and COB packaging.

Applications

- Smartphones
- PC multimedia
- Tablets
- Digital still cameras
- Toys

Features

- **Active array size:** 1280 x 720
- **Maximum image transfer rate:**
  - 1280 x 720: 30 fps
  - 640 x 480: 45 fps
- **Power supply:**
  - Analog: 2.6V ~ 3.0V (2.8V normal)
  - Core: 1.2VDC ±5%
  - I/O: 1.8V
- **Output interfaces:** 1-lane MIPI
- **Output formats:** 10-bit RAW
- **Lens size:** 1/8.755"
- **Pixel size:** 1.4 µm x 1.4 µm

Version 1.0, October 2026

OMNIVISION®

4275 Burton Drive
Santa Clara, CA 95054
USA

Tel: + 1 408 567 3000
Fax: + 1 408 567 3001
www.ovt.com

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