



OS05A10

5-Megapixel Product Brief



Versatile 5MP PureCel® Sensor with High Dynamic Range for a Wide Range of Commercial Security and Consumer Applications

OMNIVISION's low-power OS05A10 is a 5-megapixel CMOS image sensor that brings crisp 1080p high definition, 2K, and 5-megapixel video to a wide range of commercial security and consumer applications, including 360-degree full-view cameras. Built on OMNIVISION's advanced PureCel® pixel architecture, the OS05A10 utilizes backside illumination (BSI) technology to deliver enhanced low-light sensitivity and wide field-of-view (FOV).

Available in the popular 1/2.7-inch optical format, the OS05A10 enables video applications in widely used 4:3 and 16:9 aspect

ratios. The sensor can capture 1080p full high definition slow-motion video at 120 frames per second (fps) and 2688 x 1944 resolution at 60 fps.

Additionally, the OS05A10 features a 11-degree chief ray angle (CRA) and a dual-exposure staggered high dynamic range (HDR) mode to enable excellent scene reproduction in difficult high-contrast lighting conditions.

The OS05A10 is compatible with MIPI and LVDS interfaces and comes in a chip scale package (CSP).

Applications

- Security cameras
- Action cameras
- High resolution consumer cameras

Features

- **Active array size:** 2688 x 1944
- **Maximum image transfer rate:**
 - 2688 x 1944: 60 fps
- **Power supply:**
 - Core: 1.2V
 - Analog: 2.8V
 - I/O: 1.8V
- **Output interfaces:** Up to 4-lane MIPI/LVDS serial output interface
- **Output formats:** 10/12-bit RGB RAW
- **Lens size:** 1/2.7"
- **Pixel size:** 2.0 μm x 2.0 μm

Version 1.5, September 2026