

OS08A20

8-Megapixel Product Brief



High Resolution 8-Megapixel PureCel® CMOS Image Sensor Brings Superior Near-Infrared Imaging to Surveillance Applications

OMNIVISION's OS08A20 is the first 8-megapixel CMOS image sensor to combine Nyxel® technology with OMNIVISION's PureCel® pixel architecture, which allows the OS08A20 to capture ultra-high definition (UHD) 4K2K video and images that are bright and crisp in all lighting conditions. This makes it an ideal imaging solution for professional surveillance systems, as well as other nascent security applications such as body-worn cameras.

OMNIVISION's breakthrough Nyxel® technology delivers significant quantum efficiency (QE) improvements at 850 nm and 940 nm while maintaining high-modulation transfer function, allowing the OS08A20 to monitor a larger area. Additionally, by reducing the need for external lighting sources, Nyxel® technology enables lower power consumption.

The OS08A20 supports a wide range of resolution formats and frame rates, including 4K2K (3840 x 2160) in a 16:9 aspect ratio at 60 frames per second (fps), quad HD (2560 x 1440) at 60 fps, or full 1080p HD at 120 fps. It comes in a 2-micron pixel size and 1/1.8-inch optical format for improved sensitivity.

Applications

- Security cameras
- Action cameras
- High resolution consumer cameras

Features

- **Active array size:** 3840 x 2160
- **Maximum image transfer rate:**
  - 3840 x 2160: 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:** 1/1.8"
- **Pixel size:** 2.0 µm x 2.0 µm

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