OEM Automatic Ltd
Address: Whiteacres, Whetstone Leicester, LE8 6ZG
0116 284 9900 | Orders@oem.co.uk | www.oem.co.uk

ACE 2X VISSWIR

Advanced Cameras with SWIR Technology

a2A2048-110umSWIR
Basler ACE 2 USB 3.0 Interface, 110 FPS, IMX993 Sensor, 1/1.8" Sensor Format, 3.1 MP Resolution



- VGA and 1.3 Megapixel
- Up to 240 fps
- Available models for both USB 3.0 and GigE
- Rugged M8 connector
- Compact format

PRODUCT DESCRIPTION

The Basler ace 2X visSWIR cameras are high-performance industrial cameras engineered to capture both visible and short-wave infrared (SWIR) spectra, making them highly versatile for demanding imaging applications. These cameras utilise Sony's innovative SenSWIR InGaAs sensors, offering high quantum efficiency across a broad spectral range from approximately 400 nm to 1700 nm. With resolutions typically up to 1.3 megapixels and frame rates exceeding 100 frames per second, the ace 2X visSWIR series supports GigE Vision and USB 3.0 interfaces, ensuring fast data transfer and seamless integration with standard machine vision systems. Key technical features include Basler's PGI image optimisation, precision time protocol (PTP) for synchronisation, and a robust hardware design suitable for industrial environments.
In practical applications, the ace 2X visSWIR cameras are particularly useful in industries where visibility into both the visible and SWIR spectra is critical. These include semiconductor inspection, agricultural sorting, food quality analysis, and pharmaceutical verification, where material differentiation beyond the visible range enhances process control and quality assurance. The dual-spectrum capability enables tasks like detecting moisture content, inspecting silicon wafers, or identifying contaminants in food production. Their compact design and compatibility with Basler's powerful pylon Camera Software Suite also make them ideal for system integrators building advanced vision systems with complex spectral analysis needs.

TECHNICAL DATA

Sensor model	IMX993
Resolution max	2048 px × 1536 px
Frame rate max	110 fps
Mono/color	Mono
Shutter type	Global
Interface	USB 3.0
3612_Pixel size (µm)	3.45 µm × 3.45 µm
Sensor size	1/1.8"
Digital inputs	1
Approvals	CE, EAC, FCC, GenICam, KC, UKCA, RoHS, UL, USB3 Vision
IP class	IP30
Weight	90 g
Length	42.8 mm
Width	29 mm

Height	29 mm
Synchronization	free-run, hardware trigger and software trigger
Exposure control	hardware trigger and programmable via the camera API
Operating temperature	-10 °C - 50 °C

Wavelength	Visible + SWIR



