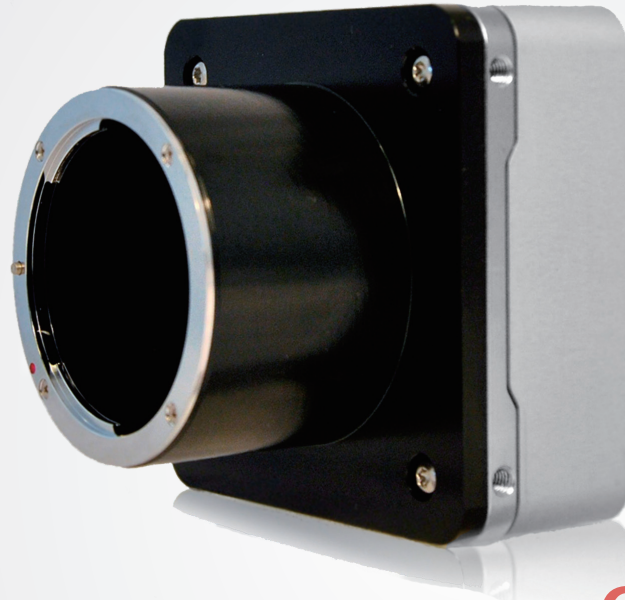


SAPPHIRE series

S-25A70

Preliminary



CoaXPress

Key characteristics

4.5 μ m ²	5210 X 5210	73fps
CMOS GS	35mm	≤6.6W
<80mm ²	<400g	54dB

- 25 Megapixel at 73 fps
- OnSemi VITA25k sensor
- True Global Shutter CMOS
- Monochrome and Color
- PRNU and DSNU calibrated correction
- Configurable 4 CXP3 to 4 CXP6 speed
- M12 I/O connector
- CoaXPress V1.1 compliant
- CoaXPress V1.0 compatible

Description

The Sapphire S-25A70 CoaXPress camera delivers 5120x5120 pixel resolution at 73 fps based on 4.5 micron square pixels. The S-25A70 camera supports OnSemi Vita sensor. The Vista solution excels in shot noise performance (SNR) and frame speed at small ROIs.

Adimec offers the Sapphire S-25A70 CXP camera in a low power compact outline design, not requiring forced cooling through a fan. This provides optimal design freedom for integrating optics and placement in inspection tools. Similar to our Q-12A180, The Sapphire is based on Adimec's new second generation CoaXPress V1.1 compliant 25 Gb/s CoaXPress Quad interface. This interface is also fully backward compatible to existing V1.0 frame grabbers.

Adimec
Excellence in Imaging

25 Megapixel High speed Metrology Camera

Specifications (target)

	S-25A70
Sensor	Vita25k CMOS
Pixel size	4.5 μm x 4.5 μm with micro lenses
Resolution	5120 (H) x 5120 (V)
Optical sensor size	35mm
Video Output	CoaXPress - V1.1 / V1.0 CXP3 or CXP6 2, 4 lanes configurable
Max frame rate (8bit 4x CXP6)	73 fps
Dynamic range	54 dB linear
Full Well*	22kel (max)
Electronic shutter	Global shutter 5T (PLS <1/700)
Image acquisition	Continuous / Controlled
Output resolution	8 / 10 Bit
Monochrome / Color	Monochrome / Color
Power input	24 VdcPoCXP
Power usage	≤ 6.6 W
Operating temperature	-10°C to +30°C or max housing temp +50°C
Reliability	MTBF > 75,000 h @ 30°C
Weight	< 400g excluding lens mount
Lens mount	F-mount (Optional: TFL-II, M42, T2 or EF)
Compliance	CE, ROHS

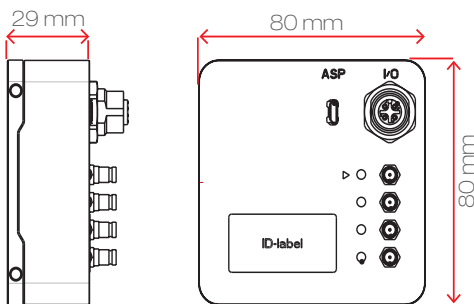
* specification OnSemi

Functionality

	Standard	Optional
Defect pixel correction	√	√
Manual white balance	-	√
One push AWB	-	√
ROI (single, multi band-WOI)	√	√
Image flip	√	√
Frame counter	√	√
LUT	√	√
Analog Sensor Gain	√	√
Digital fine gain (1x to 32x)	√	√
Automatic black level control	√	√
PRNU and DSNU calibrations	√	√
Non-volatile calibration data storage	√	√
Programmable I/O	√	√

√: standard -: Not available

Dimensions



Customization

All models of the SAPPHIRE series are customizable to fit specific system outline, functionality or performance requirements.

Please contact us about your possibilities.

For maximum image quality, performance, and reliability in demanding applications - Choose Adimec

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LFL S-25A70 EN Feb 2016 - Detailed information on request - Subject to change without notice - Actual products may differ from photos