SAPPHIRE series
S-49A70 CXP

The SAPPHIRE 49 Megapixel camera delivers a superior performance in a 7008x7000 pixels resolution running at 70 fps. It uses state of the art global shutter sensor technology. The S-49A70 offers a high dynamic range with low noise levels and a high sensitivity. The camera is compatible with other CoaXPress cameras in the SAPPHIRE series: S-25, S-50 and S-49A35.

The S-49A70 CoaXPress camera comes in a low power, compact outline design without forced cooling through a fan. This provides optimal design freedom for system integration with maximum system reliability. The camera offers Adimec Connect & Grab™ allowing engineers to start system development.

Typical applications examples:
Semiconductors metrology tools; Display Inspection; Solar panel inspection; Medical

CoaXPress®
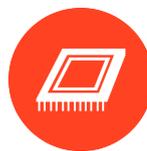
7008 x 7000 at 70 fps	Active sensor alignment
Low noise performance	Device-to-device repeatability
Low frequency flat field correction in bright	Configurable quad CXP12 speed

High Resolution Metrology Camera
49 Megapixel

Target Specifications

	S-49A70 CXP
Sensor	Gpixel GMAX3249
Pixel size	3.2 µm x 3.2 µm with micro lenses
Resolution	7008 (H) x 7000 (V)
Optical format	37,4 mm (29.9 x 22.4 mm)
Video Output	CoaXPress - CXP3/6/10/12 - 1, 2, 4 lanes configurable
Max frame rate	70 fps
Dynamic range	62.3 dB
Full Well	10.9 ke$^-$
Electronic shutter	CMOS progressive scan Global Shutter (PLS <1/15000)
Image acquisition	Timed, TriggerWidth, SyncControl, TimedTriggerControl
Output resolution	8 / 10 / 12 Bit
Monochrome / Color	Monochrome / Color
Power input	24 Vdc PoCXP
Power usage	< 15 W @ 24Vdc
Sensor temperature	+5°C to +70°C
Reliability	MTBF > 75,000 h @ 30℃
Weight	400g +/- 5% excluding lens mount
Lens mount (optional)	F, M42, T2, TFL-II mount
Compliance	CE, ROHS

Functionality

	◨	◨ (color)
Defect pixel correction	√	√
Manual and one push white balance	-	√
Programmable look-up table	√	√
Digital fine gain (1x to 32x)	√	√
Mirroring	√	√
Band ROI	√	√
Binning	√	√
Pixel based DSNU correction	√	√
Column based PRNU correction	√	√
Low Frequency Flat Field Correction (LF FFC)	√	√
Sensitivity matching between cameras	√	√
Programmable I/O	√	√
User data storage	*	*

√: standard -: Not available *:Available on request

Dimensions

29 mm   80 mm   80 mm

ASP   I/O   ID-label
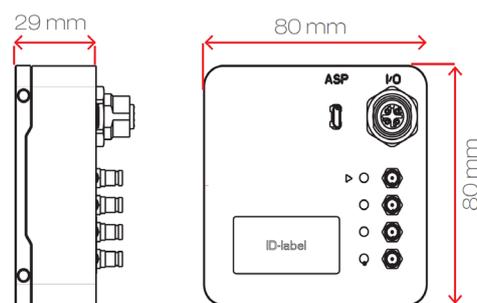
Adimec support

Adimec SAPPHIRE cameras are designed, optimized and calibrated for demanding inspection and metrology applicatons.
Additionally the Adimec application experts support our customers in integrating the SAPPHIRE camera and tuning the images to fit their measurement.

Please contact your Adimec representative for further assistance.

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

Adimec
www.adimec.com