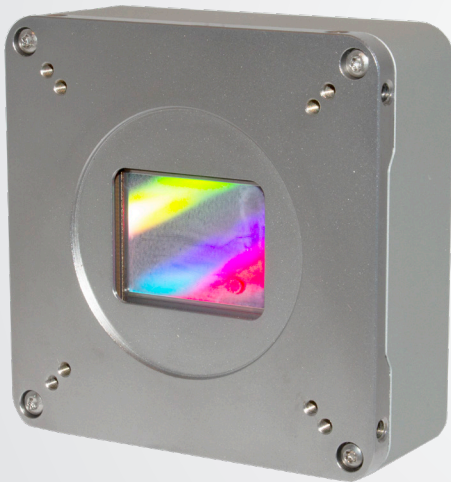# SAPPHIRE series
S-65A70-Kx/CXP-12

Adimec
Excellence in Imaging

The SAPPHIRE S-65A70 offers the next leap for ultra-high-resolution in-line inspection tools and real time medical imaging by combining 65 megapixel together with frame speeds up to 70 frames per second. The camera delivers a superior performance with a resolution of 9344 x 7000 pixels, high sensitivity, low noise levels and good dynamic range. With a pixel size of 3.2 µm2 this sensor has the right balance between performance, good angular sensitivity and optical format for cost effective optics.

The camera functionality is compatible with other cameras in the SAPPHIRE series: S-25, S-50 and S-65A35.

Typical applications examples: Semiconductors metrology tools; Flat panel glass inspection; Solar panel inspection; Medical

CoaXPress®

Preliminary

65 Megapixel Resolution

Configurable quad CXP12 speed

True Global Shutter CMOS

Low noise performance

Frame speeds up to 70 fps

GPixel sensor

Target Specifications

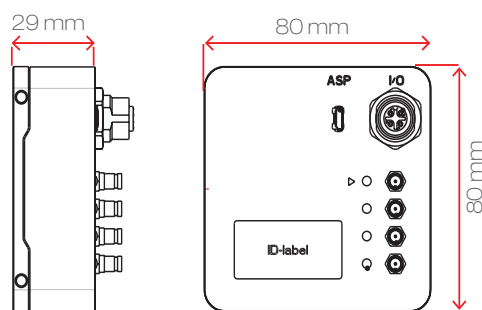| S-65A70	
Sensor	Gpixel GMAX3265
Pixel size	3.2 μm x 3.2 μm with micro lenses
Resolution	9344 (H) x 7000 (V)
Optical format	37,4 mm (29.9 x 22.4 mm)
Video Output	CoaXPress - V1.1.1 CXP3, 6 and 12 1, 2, 4 lanes configurable
Max frame rate	70 fps (10 bit)
Dynamic range*	> 60 dB* (10 bit)
Full Well*	10.9 ke
Electronic shutter	Progressive scan Global Shutter (PLS <1/25000)
Image acquisition	Timed, TriggerWidth, SyncControl, TimedTriggerControl
Output resolution	8 / 10 / 12 Bit
Monochrome / Color	Monochrome / Color
Power input	24 Vdc PoCXP
Power usage	< 13 W
Operating temperature	0°C to +30°C and a max sensor temperature of +60°C
Reliability	MTBF > 75,000 h @ 50°C
Weight	< 400g excluding lens mount
Lens mount (optional)	F, M42, T2, TFL-II mount
Compliance	CE, ROHS

*Sensor specification

Functionality

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Defect pixel correction	√	√
Manual white balance	-	√
One push white balance	-	√
Region of interest	√	√
Frame counter	√	√
Look-up table	√	√
Digital fine gain (1x to 32x)	√	√
Automatic black level control	√	√
Dark and bright uniformity corrections	√	√
Low Frequency Flat Field Correction (LF FFC)	√	-
User set data storage	√	√
Programmable I/O	√	√

√: standard -: Not available

Dimensions

29 mm

80 mm

ASP   I/O

ID-label

80 mm

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

www.adimec.com