# SAPPHIRE series S-65A35





The SAPPHIRE 65 Megapixel camera delivers a superior performance in a 9344x7000 pixels resolution running over 35 fps. It uses state of the art global shutter sensor technology. The S-65A35 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 and S-50.

The S-65A35 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 &  $Grab^{\mathbf{M}}$  allowing engineers to start system development.

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



**Preliminary** 



65 Megapixel Resolution



True Global Shutter CMOS



Frame rate 65+ fps



No forced cooling required



Low noise performance



GPixel sensor

## **High Resolution Metrology Camera** 65 Megapixel

#### **Target Specifications**

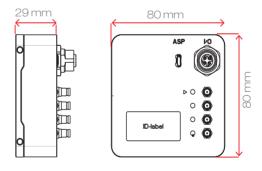
	S-65A35
Sensor	Gpixel GMAX3265
Pixel size	$3.2~\mu m$ x $3.2~\mu m$ with micro lenses
Resolution	9344 (H) x 7000 (V)
Optical format	37,4 mm (29.9 x 22.4 mm)
Video Output	CoaXPress - V1.1.1 CXP3 or CXP6 1, 2, 4 lanes configurable
Max frame rate	35 fps
Dynamic range*	66 dB
Full Well*	12.5 ke <sup>-</sup>
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	< 11 W
Operating tempreture	0°C to +30°C and a max housing temp +50°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** 

	*	*
Defect pixel correction	$\sqrt{}$	$\sqrt{}$
Manual white balance	-	$\sqrt{}$
One push white balance	-	$\sqrt{}$
Region of interest	$\sqrt{}$	$\sqrt{}$
Frame counter	<b>V</b>	$\sqrt{}$
Look-up table	<b>V</b>	<b>√</b>
Digital fine gain (1x to 32x)	<b>V</b>	
Automatic black level control	$\sqrt{}$	$\sqrt{}$
Dark and bright uniformity corrections	<b>V</b>	$\sqrt{}$
Low Frequency Flat Field Correction (LF FFC)	<b>V</b>	-
Sequential programmable LF FFC	$\sqrt{}$	-
User set data storage		
Programmable I/O	<b>V</b>	
T		

<sup>√:</sup> standard -: Not available \* Available Q3-2019

#### **Dimensions**



### Adimec support

Adimec SAPPHIRE cameras are designed, optimized and calibrated for demanding inspection and metrology applications.

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

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