# SAPPHIRE series S-25A30





#### Key characteristics



- 25 mpx at 32 fps
- OnSemi VITA 25k sensor
- True Global Shutter CMOS
- Monochrome and Color
- Camera Link (Full / Deca)

## **Description**

The S-25A30 is a 25 megapixel CMOS global shutter camera and delivers images of  $5120 \times 5120$  pixels at 32 fps over Camera Link. Using the standard Region of Interest function the frame rate can be increased, e.g. 100 fps at 8 Mpx.

Embedded real-time pixel processing minimizes blemishes and maximises uniformity. The combination of Adimec image quality, form factor and low power usage makes the camera ideal for inspection systems that require high resolution to increase in throughput or accuracy.



### **Ultra High Resolution Camera for Machine Vision**

#### **Specifications**

	S-25A30
Sensor	Vita25k CMOS
Pixel size	$4.5~\mu m$ x $4.5~\mu m$ with micro lenses
Resolution	5120 (H) x 5120 (V)
Optical sensor size	35 mm
Video Output	Camera Link (Full / Deca), 66 or 85 Mhz
Max frame rate (10 tap, 8 bit)	32 fps
Dynamic range	52 dB
Full Well	13 ke (max linear)
Electronic shutter	Global shutter 5T
Image acquisition	Continuous / Controlled / Triggered
Output resolution	8 or 10 bit (8 tap), 8 bit (10 tap)
Monochrome / color	Monochrome / Color (Bayer RGB)
Power input	10 - 24 Vdc
Power usage	≤ 7.5 W
Operating tempreture	0°C to +40°C,
Reliability	> 75,000 h @ 40°C
Weight	400 g excluding lens mount
Lens mount	Options: TFL-II, F-mount, M42 or T2
Compliance	CE, ROHS

## **Functionality**

Flat Field Correction (FFC)		√
Defect pixel correction	$\sqrt{}$	$\sqrt{}$
Manual white balance	-	$\sqrt{}$
One push AWB	-	$\sqrt{}$
ROI (single, multi band)	$\sqrt{}$	√
Frame counter		√
LUT	$\sqrt{}$	√
Digital fine gain (1x to 8x)		√
Automatic black level control		√
PRNU and DSNU calibrations		√
Non-volatile calibration data storage	$\sqrt{}$	√
Programmable I/O	√	
√ Standard - Not available		

<sup>√:</sup> Standard -: Not available

#### **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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