SAPPHIRE series
S-50A30

Adimec
Excellence in Imaging

The SAPPHIRE S-50A30 camera offers an AMS Cmosis based 50 Megapixel resolution running up to 30 frames per second.

This S-50A30 offers the next step in image performance. The camera offers the best sensitivity above 30 megapixel, a low dark current for applications requiring low exposure times as well a high dynamic range with low read noise which make it well suited for dark and bright field inspection. Global non-uniformities in the scene due to optics or lightning can be corrected via (multiple) Low Frequency Flat Field Correction sets.

Typical application examples:
• Display inspection
• Semiconductors metrology tools
• Solar panel Inspection
• Areal mapping

The Adimec S-50A30 offers our Adimec Connect and Grab™ experience, allowing engineers to start system development immediately after camera installation

CoaXPress®

Target

	50 Megapixel Resolution		Low power, no active cooling required
	Repeatable performance		Adimec Connect and Grab™
	Low noise performance		Optimized uniformity

Target Specifications

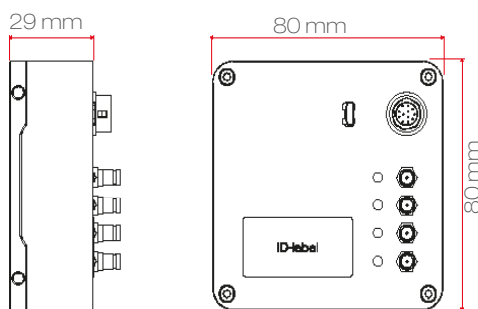|	S-50A30
Sensor	AMS Cmosis CMV50000 CMOS
Pixel size	4.6 µm x 4.6 µm with micro lenses
Resolution	7920 (H) x 6004 (V)
Optical format	35 mm
Video Output	CoaXPress - V1.1.1 CXP3 or CXP6 1, 2, 4 lanes configurable
Max frame rate	30 fps
Dynamic range*	64 dB
Full Well*	14.5 ke$^-$
Electronic shutter	Global shutter (PLS <1/18000)
Image acquisition	Continuous / Controlled
Output resolution	8 / 10 / 12 Bit
Monochrome / Color	Monochrome / Color
Power input	24 Vdc PoCXP
Power usage	< 11 W
Operating tempreture	-10℃ to +30℃ or max housing temp +50℃
Reliability	MTBF > 75,000 h @ 50℃
Weight	< 400g excluding lens mount
Lens mount	Optional: F, M42, T2, TFL-II mount
Compliance	CE, ROHS

*Sensor specification

Functionality

	◧	🎨
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)	√	-
Sequential programmable LF FFC	√	-
User set data storage	√	√
Programmable I/O	√	√

√: standard -: Not available

Dimensions

29 mm   80 mm   80 mm

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

www.adimec.com