QUARTZ series Q-12A180





Key characteristics

- 12 Megapixel up to 187 fps
- True Global Shutter CMOS
- Factory and user calibrated 2D PRNU and DSNU correction
- Configurable 1-CXP3 to 4-CXP6 interface.
- M12 I/O connector optional
- CoaXPress V1.1 compliant
- CoaXPress V1.0 compatible

Description

The Quartz Q-12A180 CoaXPress camera brings 4096 by 3072 high quality pixels to the image for real time metrology tasks with a reliable high speed CoaXPress data interface. With 12 Megapixel resolution and 187 frames per second of measurement speed in the Q-12A180, you can improve the precision and the throughput of your system. The accuracy of the information is preserved for each and every image with Adimec's True Accurate Imaging design and the CMOSIS CMV12000 CMOS global shutter sensor. Adimec offers the Q-12A180 in a low power compact outline, providing you with optimal design freedom for integrating optics. Pioneering CoaXPress since 2008, we have now developed a highly integrated 2nd generation CoaXPress V1.1 compliant 25Gb/s CoaXPress Quad interface. This interface is also fully backward compatible to existing V1.0 framegrabbers through a configuration tool for all major framegrabber brands. Sensor alignment and retention is well suited for industrial optics with large numerical apertures where focus and sensitivity over the complete image is critical.



High resolution, High speed Metrology Camera

Specifications

	Q-12A180
Sensor	CMV12000
Pixel size	5.5 μm x 5.5 μm
Resolution	4096 (H) x 3072 (V)
Optical sensor size	APS-C
Video Output	CoaXPress - Configurable 1,2 or 4 lanes CXP3 or CXP6 V1.1 / V1.0
Max frame rate Sustained @ 8 bit full resolution	187 fps
Dynamic range	60 dB* (>54 dB linear)
Electronic shutter	Global shutter
Image acquisition	Continuous / Controlled
Output resolution	8 or 10 Bit
Monochrome / color	Monochrome / Color
Power input	24 Vdc PoCXP
Power usage	< 9 W
Operating temperature	-10°C to +30°C or max housing temp 50°C
Testing	Every camera is 100 % tested on all specifications
Reliability	MTBF > 75,000 h @ 30°C
Weight	540 g including standard lens mount (lens mount 160 g)
Lensmount	F-mount (Optional: TFL-II, M42, T2 or EF)
Compliance	CE, ROHS

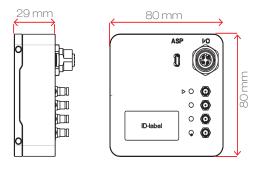
^{*} According to sensor specifications

Functionality

	Q-12A180	
		•
Defect pixel correction	$\sqrt{}$	$\sqrt{}$
Manual white balance	-	$\sqrt{}$
One push AWB	-	$\sqrt{}$
Region of Interest		V
Image flip	$\sqrt{}$	$\sqrt{}$
Frame counter	$\sqrt{}$	$\sqrt{}$
LUT	$\sqrt{}$	$\sqrt{}$
Analog Sensor Gain	$\sqrt{}$	
Digital fine gain (1x to 32x)	$\sqrt{}$	$\sqrt{}$
Automatic black level control	$\sqrt{}$	$\sqrt{}$
PRNU and DSNU calibrations	$\sqrt{}$	$\sqrt{}$
Non-volatile calibration data storage	$\sqrt{}$	$\sqrt{}$
Programmable I/O	$\sqrt{}$	√

^{√:} Standard O: Optional -: Not available

Dimensions



Customization

All models of the QUARTZ series are customizable to fit specific system outline, functionality or performance requirements.

Please contact us about your possibilities.

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

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