QUARTZ
Q-12A180/CXP

Adimec
Excellence in Imaging
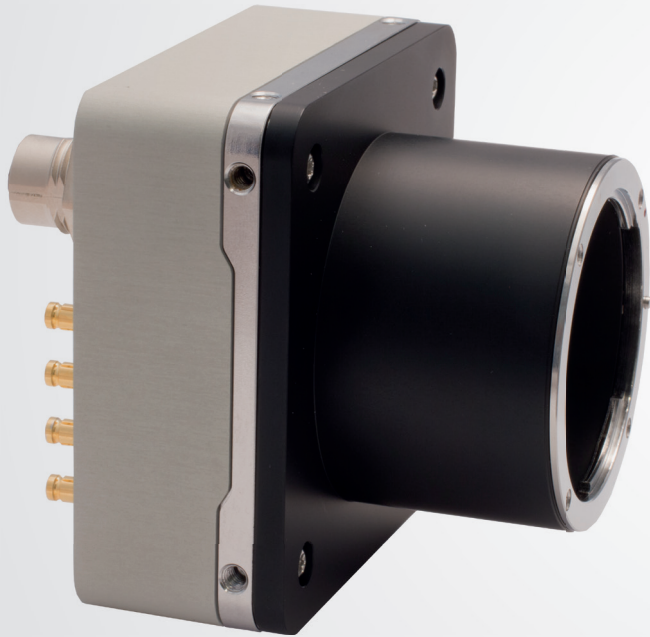
The Quartz Q-12A180 CoaXPress camera brings 4096 by 3072 high quality pixels to the image for real time metrology tasks with a reliable high speed CoaXPress data interface.

With 12 megapixel resolution and 187 frames per second of measurement speed in the Q-12A180 the precision and the hroughput of your system can be improved. The accuracy of the information is preserved for each and every image by the use of Adimec's True Accurate Imaging technique and the AMS CMV12000 CMOS global shutter sensor. To further optimize the system in low sensitivity conditions a pixel based Dark Signal Non-Uniformity correction is added. This feature creates a perfect uniform image in dark conditions.

As a CoaXPress pioneer Adimec developed a highly integrated 2nd generation CoaXPress V1.1.1 compliant 25Gb/s CoaXPress Quad interface.
Adimec offers the Q-12A180 in a low power compact outline, which provides optimal design freedom for integrating optics. Sensor alignment and retention is well suited for industrial optics with large numerical apertures where focus and sensitivity over the complete image is critical.

CoaXPress®

Target

12 Megapixel Resolution	No forced cooling required
True Global Shutter CMOS	Low noise performance
Frame rate 187 fps	CMOS sensor

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	56 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	< 13 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)

Functionality

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

√: Standard O: Optional -: Not available

Dimensions

29 mm 80 mm 80 mm

ASP I/O ID-label
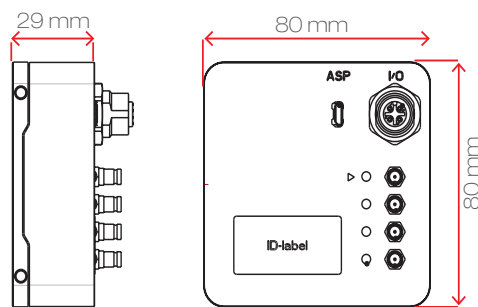
Customization

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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www.adimec.com