# QUARTZ Q-12A180/CXP





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. The CoaXPress Quad interface is 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.



**Target** 



12 Megapixel Resolution



True Global Shutter CMOS



Frame rate 187 fps



No forced cooling required



Low noise performance



CMOS sensor

## High resolution, High speed Metrology Camera

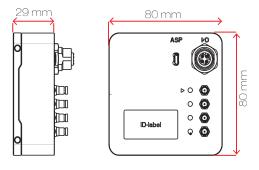
## **Specifications**

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	< 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

## **Functionality**

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

#### **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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