

QUARTZ series

Q-4A180 / Q-12A65



Key characteristics

- 4 and 12 Megapixel
- Global Shutter CMOS
- Up to 180 full frames per second
- Monochrome / Color / NIR
- 12 dB noise reduction
- Dynamic range 90dB (HDR mode)
- Flat field correction (FFD)
- Camera Link (Base/medium/Full/Deca)
- CoaXPress V1.0compliant

Description

The Quartz series supports 4 and 12 Mpx sensor solutions with acquisition speeds up to 180 fps (4 Mpx) and 66 fps (12 Mpx). All Quartz cameras are equipped with a pipe-lined global shutter CMOS sensor and embedded in a robust housing. Pipe-lined global shutter technology assures low read noise combined with accurate shutter performance. All models of the Quartz series are fitted with Adimec True Accurate Imaging® technology.

The Quartz series is a combined set of image enhancement technologies enabling the best imaging performance for inspections and metrology applications.

Specifications

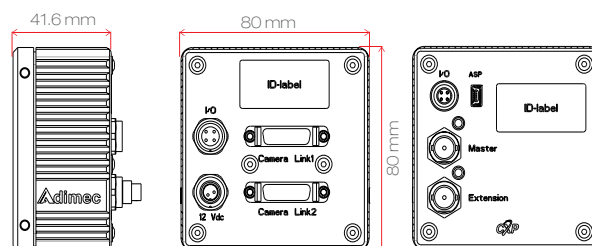
	Q-4A180	Q-12A65
Sensor	CMV4000 CMOS	CMV12000 CMOS
Pixel size	5.5 µm x 5.5 µm with micro lenses	
Resolution	2048 (H) x 2048 (V)	4096 (H) x 3072 (V)
Optical size	1"	APS-C
Video output	Camera Link (Base/Medium/Full/Deca) CoaXPress (CXP3/CXP6)	Camera Link (Base/Medium/Full/Deca)
Max frame rate Sustained @ 8 bit full resolution	180 fps (CL) 180 fps (CXP)	66 fps (CL)
Max frame rate Sustained @ 10 bit full resolution	80 fps (CL) 180 fps (CXP)	54 fps (CL)
Dynamic range	60 dB (90 dB in HDR mode)	
Shot noise improvement	12 dB (additional to sensor)	
Electronic shutter	Global shutter (high shutter efficiency)	
Image acquisition	Continuous / Controlled	
Output resolution	8 or 10 Bit	
Monochrome / Color	Monochrome / Color (Bayer RGB) /NIR	
Power input	10 - 24 Vdc	
Power usage	4.5 W	9 W
Operating temperature	0°C to +40°C	
Reliability	MTBF > 75,000 h @ 40°C	
Weight	295 g (excluding lens mount)	
Lens mount	C, T2 or M42 mount	T2, M42, F or TFL-II mount
Compliance	CE, ROHS	

Functionality

	Black & White	Color
Flat field correction (FFC)	√	√
Defect pixel correction	√	√
ROI	√	√
Frame counter	√	√
LUT	√	√
Digital fine gain (1x ~ 8x)	√	√
HiQ mode (averaging)	√	√
HDR mode	√	√
Mirroring	√	√
Non-volatile calibration data storage	√	√
Programmable I/O	√	√

√: standard -: 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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