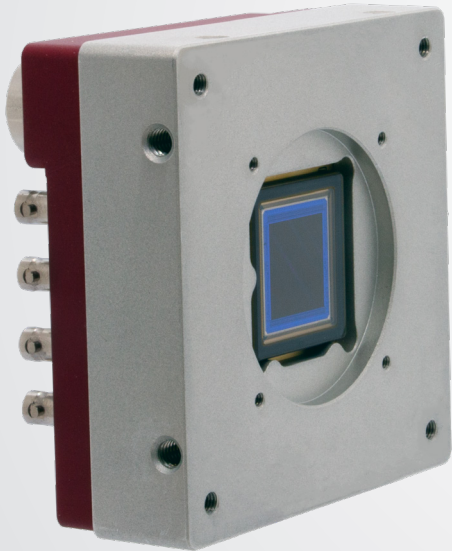


QUARTZ series

Q-25A150x/CXP

Adimec
Excellence in Imaging



The QUARTZ Q-25A150 CoaXPress camera operates the Gpixel GMAX0505 sensor at a unique performance in terms of noise, power and ease of integration. With a 5120 x 5120 pixel resolution and 150 frames per second of measurement speed, the Q-25A150 can greatly improve the precision and throughput of your system.

The Q-25A150 supports all required functionality for real time metrology tasks, such as dark field and (multiple) bright field corrections, in a 65x65x25 mm formfactor. Each camera is calibrated and tested to ensure it meets high quality performance standards as well as copy exact requirements.

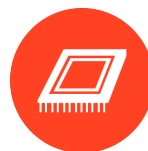
The Q-25A150 comes in a low power, compact outline design without forced cooling through a fan. This provides optimal design freedom for system integration with maximum system reliability. The camera offers Adimec Connect & Grab™ allowing engineers to start system development at camera arrival.

Typical application examples: Semiconductors component inspection, (3D) PCBA optical inspection, Semiconductors Advanced Packaging, Display Inspection, and more.

CoaXPress®



5120 x 5120 at 150 fps



GMAX0505



Compact outline



Device-to-device repeatability



Optimized image quality



CXP-12 interface for 4 x 12.5 Gb/s

High Speed Inspection & Metrology Camera

26 Megapixel @ 150 fps



Target Specifications

	Q-25A150/CXP
Sensor	GPIXEL GMAX0505
Pixel size	2.5 µm x 2.5 µm
Resolution	5120 (H) x 5120 (V)
Electronic shutter	CMOS progressive scan Global Shutter (PLS < 1/10000, angular dependent)
Video Output	CoaxPress CXP3/6/10/12 - 1, 2 and 4 lanes configurable
Image acquisition	Timed, TriggerWidth, SyncControl, TimedTriggerControl
Output resolution	8 / 10 / 12 bit
Power input	24 Vdc nominal, range: 18.5 Vdc to 26 Vdc PoCXP
Power usage	Typical 11 W @ 24 Vdc full continuous operation at full ROI at maximum framespeed
Operating sensor temperature	+5°C to +70°C
Reliability	> 75,000h @ 30°C calculated according to the part stress analysis of MIL-HDBK-217F for ground fixed, uncontrolled environment.
Weight	195 g +/- 5% excl. lensmount, heatsink and fan
Lens mount (optional)	4 x M3 at 54mm pitch - 4 x M2 at 31mm pitch (on request: Fn, C)
Compliance	CE, ROHS

Performance (typical @ 10 bit)

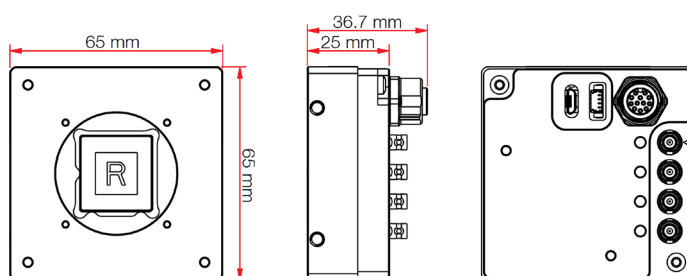
Gain mode	Max full well	High full well	Max dynamic range	High sensitivity
Dynamic range	58.9 dB	61.4 dB	62.7 dB	62.5 dB
Full well	6.8 ke-	6.5 ke-	6.0 ke-	4.8 ke-
Dark noise	7.73 e-	5.52 e-	4.42 e-	3.62 e-

Functionality Highlights

		
Defect pixel correction	√	√
Manual and one push white balance	-	√
Programmable look-up table & gamma curve	√	√
Analog gain	√	√
Digital fine gain	√	√
Digital binning	*	*
Programmable region of interest	√	√
Multi band ROI	*	*
Mirroring	*	*
Low Frequency Flat Field Correction (LF FFC)	√	√
Uniformity correction	√	√
Sensitivity matching between cameras	√	√
Programmable I/O	√	√
User data storage	*	*

√: standard -: Not available *: Available on request

Dimensions



Adimec support

Adimec QUARTZ cameras are designed, optimized and calibrated for demanding inspection and metrology applications.

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

North America	Europe	Japan & Korea	Asia - Pacific	China
Phone: (+1) 781-279-0770	(+31) 40-2353900	(+81) 3-5968-8377	(+65) 6334-1236	(+86)21 6266 1692
Fax: (+1) 781-279-0771		(+81) 3-5968-8388	(+65) 6334-1436	
E-mail salesus@adimec.com	saleseu@adimec.com	salesjp@adimec.com	salesap@adimec.com	salescn@adimec.com.cn

LFQ-Q-25A150 CXP rev.0.3 - Detailed information on request - Subject to change without notice - Actual products may differ from photos

Adimec
www.adimec.com