



Acuros™ CQD™ 640, 1280, 1920 SWIR Cameras

Acuros™ CQD™ SWIR cameras are designed for high resolution, broadband SWIR imaging, and come equipped with single-stage TECs for lower noise operation and greater image stability. Brilliant, high resolution images are delivered with high frame rates, high dynamic range, and a broad range of exposure times. Our pioneering CQD sensor technology enables 2.1 megapixel, full-HD resolution, the first commercially available SWIR product of its kind. Inherently lower cost CQD sensor processing enables lower costs per megapixel. Acuros cameras are GenICam compliant, and come equipped with USB3 or GigE Vision interfaces. The cameras are designated EAR-99, requiring no license for lawful export.

Features

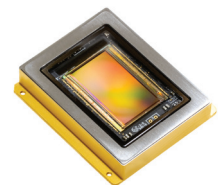
- 640 x 512, 1280 x 1024, 1920 x 1080
- TEC cooling for low noise
- Full Visible-to-SWIR bandwidth
- USB3 Vision, GigE Vision interfaces
- C-, F-, M-42 Mount interfaces
- Compatible with range of SWIR lenses
- Software GUI for camera control
- Pixel non-uniformity correction
- SDK included for user development

Applications

- Machine Vision
- Silicon Inspection
- Instrumentation
- Beam Profiling
- Surveillance
- Hyperspectral
- Chemical Sensing
- Agriculture
- Medical Imaging

Sensor Technology

CQD sensors are fabricated via deposition of quantum dot semiconductor crystals directly upon the surface of the silicon wafer. The resulting CQD photodiode array enables higher resolution, smaller pixel pitch, broader bandwidth, low noise, and low inter-pixel crosstalk, eliminating the prohibitively expensive hybridization process inherent to InGaAs sensors. CQD sensor technology is silicon wafer-scale compatible, opening it's potential to very low cost, high-volume applications.















Acuros CQD Sensor




High Definition. SWIR Vision.

www.swirvisionsystems.com

Cameras

Camera Model	Resolution	Megapixel	Interface	TEC	Shutter	Frame Rate (fps)	Pixels (µm)	Vis-SWIR (nm)	Lens Mounts
Acuros™ CQD™ 640 GigE Camera 	640 x 512	0.33		TEC	Global	380	15 x 15	400 - 1700	C, F, M-42
Acuros™ CQD™ 640 USB3 Camera 	640 x 512	0.33		TEC	Global	380	15 x 15	400 - 1700	C, F, M-42
Acuros™ CQD™ 1280 GigE Camera 	1280 x 1024	1.31		TEC	Global	90	15 x 15	400 - 1700	C, F, M-42
Acuros™ CQD™ 1280 USB3 Camera 	1280 x 1024	1.31		TEC	Global	90	15 x 15	400 - 1700	C, F, M-42
Acuros™ CQD™ 1920 GigE Camera 	1920 x 1080	2.07		TEC	Global	60	15 x 15	400 - 1700	F, M-42
Acuros™ CQD™ 1920 USB3 Camera 	1920 x 1080	2.07		TEC	Global	60	15 x 15	400 - 1700	F, M-42

Developmental Cameras

Camera Model	Resolution	Megapixel	Interface	TEC	Shutter	Frame Rate (fps)	Pixels (µm)	Vis-SWIR (nm)	Lens Mounts
Acuros™ CQD™ eSWIR Cameras 	640 to 1920	0.33 to 2.07	 	TEC	Global	60 - 380	15 x 15	400 - 2100	C, F, M-42

Contact us:

info@swirvisionsystems.com

+1 919.248.0032



High Definition. SWIR Vision.

www.swirvisionsystems.com