LANSIS 261 CCD CAMERA

KEY FEATURES

- Back-Illuminated imaging CCD sensor
- 2048 × 263 array with 15 µm pixels
- Up to 95% quantum efficiency (UV to NIR)
- Low read noise (~5 e^-) and low dark current
- eXcelon® technology for enhanced response
- USB 3.0 interface and full SDK support for integration

TYPICAL APPLICATIONS

- Raman spectroscopy
- Optical emission spectroscopy (OES)
- Fluorescence
- Photoluminescence (PL)

RELIABILITY

- One-year warranty
- Permanent vacuum guarantee

High-sensitivity spectroscopy CCD for OEM integration

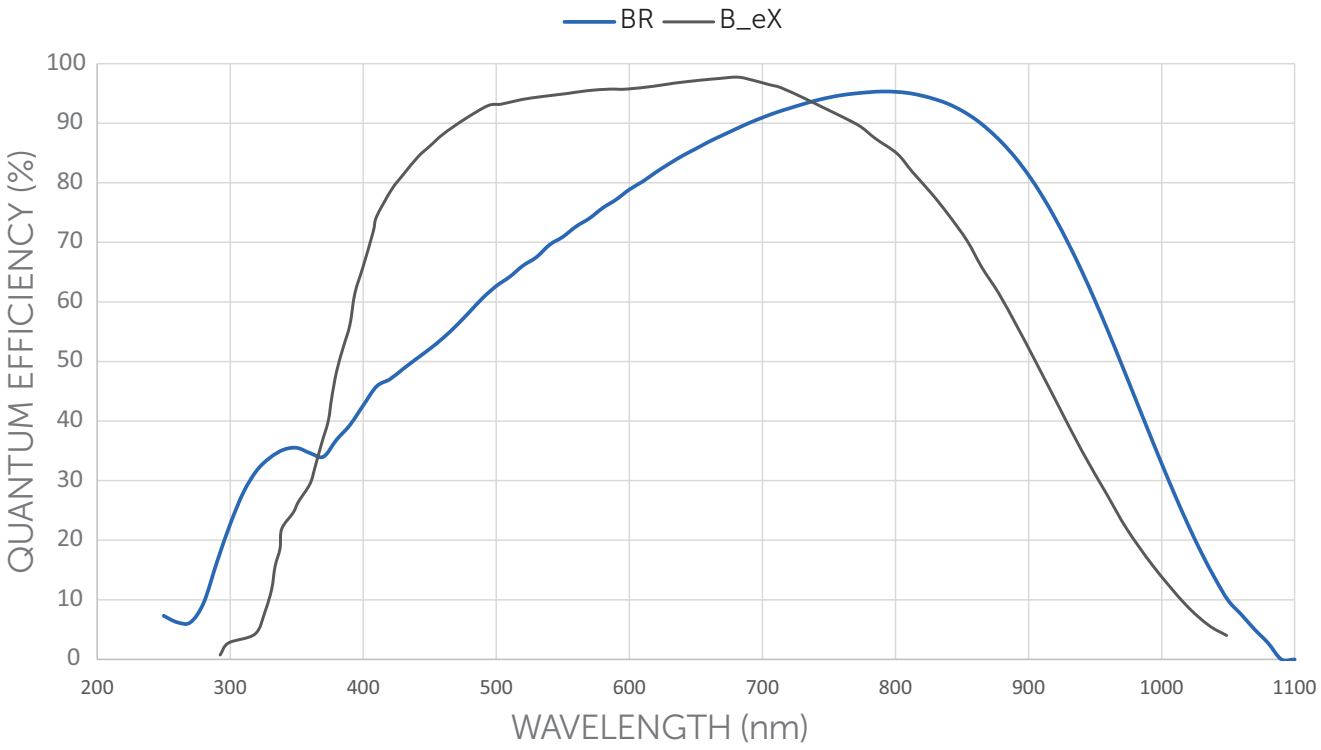
The LANSIS 261 camera is a back-illuminated, deep-depletion spectroscopy CCD camera designed for high-sensitivity detection in NIR and Raman applications. It combines low noise, high quantum efficiency, and flexible integration for OEM and system developers.

Engineered for spectroscopy applications, the LANSIS 261 combines deep-depletion CCD architecture with high-speed readout to deliver strong performance across UV to NIR wavelengths. eXcelon® technology enhances sensitivity while minimizing etaloning, supporting reliable detection in low-light and signal-limited conditions.

LANSIS 261 SPECIFICATIONS

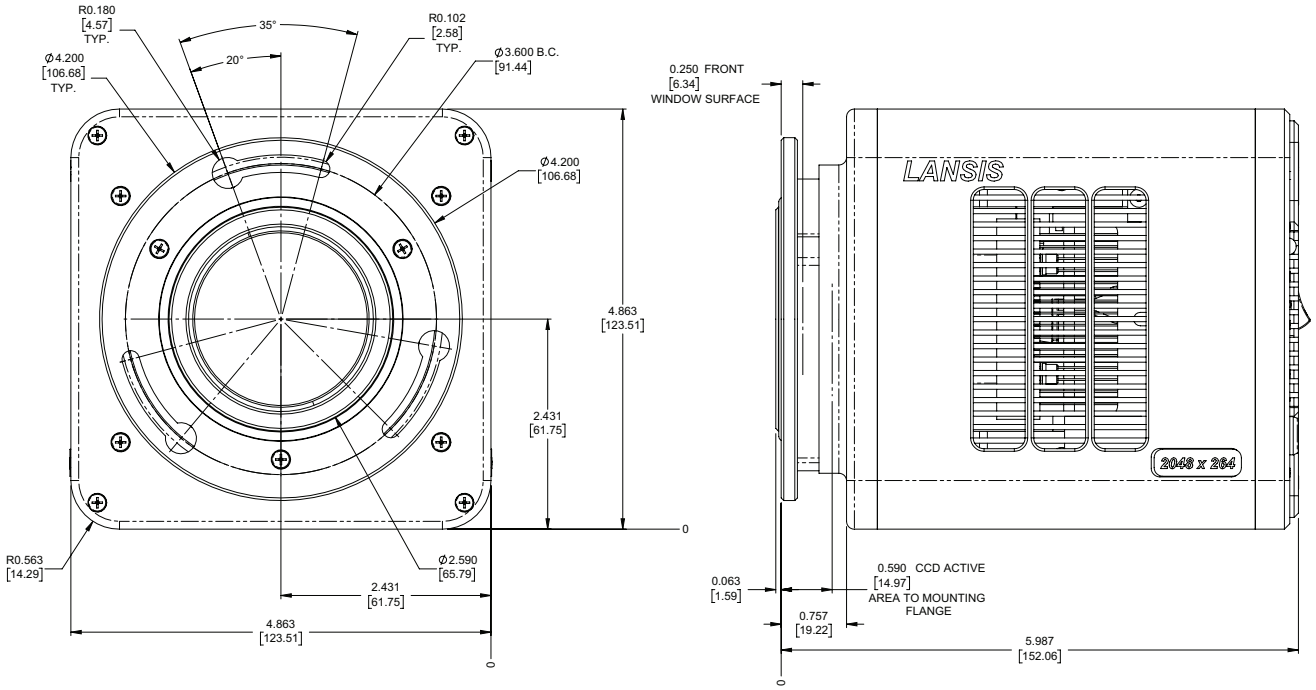
CCD FEATURES	
CCD image sensor	• High performance AIMO CCD sensor, Grade 1 • Back-illuminated deep-depletion CCD • Highest average QE from UV to NIR with negligible etaloning
CCD format	2048 x 263 pixels
Imaging area	30.72 x 3.96 mm
Pixel size	15 x 15 µm
Pixel fill factor	100%
Pixel full well capacity	70ke$^-$ (typical) low grain
QE	Up to 95% (see curve on page 3)
Dark current	0.02 e$^-$/p/s at -65°C (typical)
PERFORMANCE CHARACTERISTICS	
Cooling method	Thermoelectric air-cooled (TEC)
Cooling (25°C room temperature)	Air: -60°C (-65°C typical)
Thermostatic precision	±0.05°C
ADC speeds/bit	100 kHz/16-bit and 2 MHz/16-bit
Read noise	4e$^-$ rms (typical), at 100 kHz, high gain
Vertical shift speed	Selectable: 7.4 µsec/row or 19 µsec/row
COMMUNICATION	
External trigger modes	• Start on single trigger • Readout per trigger • Exposure during trigger pulse
Trigger specification	Configurable – positive or negative edge
Time stamping	Begin and/or end exposure with 100 ns precision
I/O signals	MCX to BNC; Trigger-In plus two programmable logic outputs (OUT1, OUT2)
Data interface	USB 3.2 Gen 1 (5 Gbps)
TTL requirements	Input – TTL, Output – Push-pull
PHYSICAL	
Dimensions	15.1 cm (5.91") L x 12.35 cm (4.86") W x 12.35 cm (4.86") H
Weight	3.05 kg (6.72 lbs)
Camera mount	3.6" BC flange compatible w/ Teledyne Princeton Instruments spectrographs. OEM-specific mounts available on request.
OTHER	
Certifications	FCC Part 15, Subpart B; Class A, CE, UKCA, RoHS 3, PSE, ISO 9001:2015
Operating Systems	Microsoft® Windows® 10/11 64-bit, RedHat® Enterprise, Linux® v7 x 64-bit

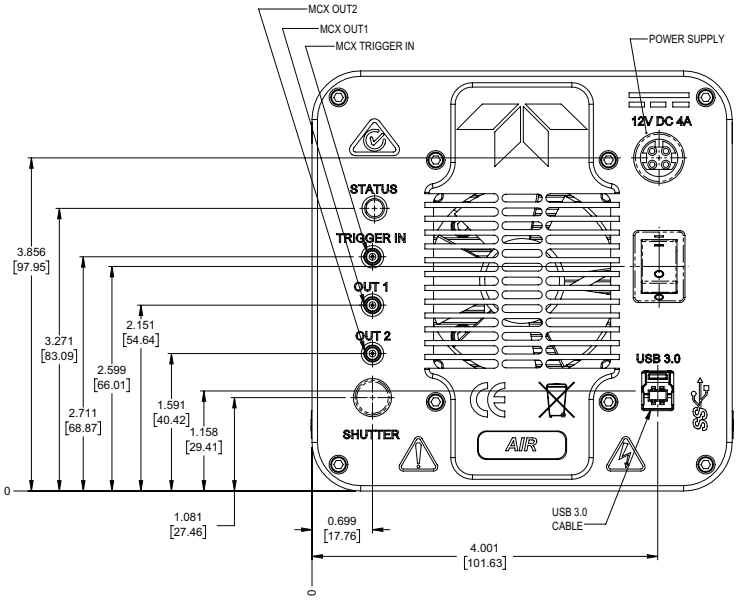
LANSIS 261 SENSOR OPTIONS



A LANSIS 261 camera shown with OEM spectrograph 320

LANSIS 261 SPEC-MOUNT DIMENSIONAL OUTLINES (Unit: mm)





FOR MORE INFORMATION REACH OUT ONLINE:

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Revision Date: 2026 07 23