



# NOCTURN XL

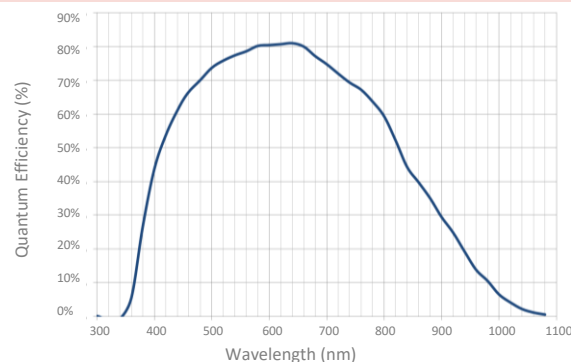


## Features

- Ideal for 24/7 operations
- Less than 4e-read-out noise
- 860 nm and 1064 nm laser line detection
- 1.3 Mpx
- 100 fps
- Digital zoom up to 8x

Camera	Specifications
Sensor Resolution	1280 x 1027 Pixels
Sensor Pixel Pitch	9.7 $\mu\text{m}$ x 9.7 $\mu\text{m}$
Sensor Well Capacity	> 25000 e-
Sensor Dynamic Range	> 60 dB
Sensor Read Noise	< 4e- median at 60 Hz
Sensor Quantum Efficiency	> 80% at 650 nm
Frame Rate	50, 60, or 100 Hz with full field resolution (user selectable)
Sensor Image Lag	< 0.1%
Sensor Shutter Mode	Rolling
Features	
Imaging Start Up Time	< 5 sec
Image Correction	Bad pixel replacement and 2 points non-uniformity correction (NUC)
Gain Control	Automatic gain and exposure control or manual
Windowing	Full field of view down to 1/2 vertical resolution
On-Screen Display	Full on-screen display capability with text, standard geometrical shapes and graphics
Digital Zoom	Up to 8X (0.001 increment resolution)
Contrast Enhancement	Contrast stretching, equalization and adaptive equalization
Snapshots	On-board capture of *, JPG or *, PGM (8/10b)
Housing	
Lens Mount	CS-mount
Dimensions (excluding connectors) (Width x Height x Depth)	34.1 mm x 36.6 mm x 37.4 mm
Sensor Well Capacity	< 85g

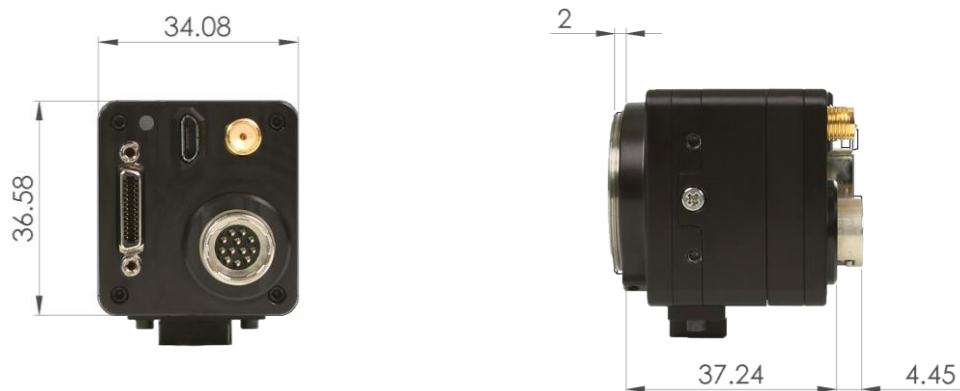
## Quantum Efficiency Curve shows > 80% at peak with microlenses





Input/Output	
Digital Video Output	10/8 bit CameraLink® Compatible
Analog Video Output	NTSC/PAL (user selectable)
Communications	Serial via CameraLink® Compatible or USB
Synchronization	Frame start trigger (2 to 12 V) Analog output strobe reference (2 to 12V)
Environmental and Power	
Operating Temperature	-40° C to +60° C
Storage Temperature	-50° C to +80° C
Input Voltage	USB powered or external +5 to +15 VDC
Power (typical)	60/50 Hz mode: < 1.8 W; 100 Hz mode: <2.25 W

**Mechanical Dimensions for XL Camera Body (in mm)**



NOCTURN XL Camera is powered by the LYNX CMOS imaging sensor, optimized for low light level imaging.

The LYNX CMOS imaging sensor is the first operational sensor specifically designed with Night Vision, Homeland Security and Surveillance applications in mind.

This fully solid-state CMOS sensor provides excellent imaging across varying light conditions, from daylight to low-light levels such as those found during a quarter moon.

The LYNX CMOS imaging sensor provides full SXGA resolution at 100 frames per second, with < 4e- read out noise and without cooling.



LYNX