



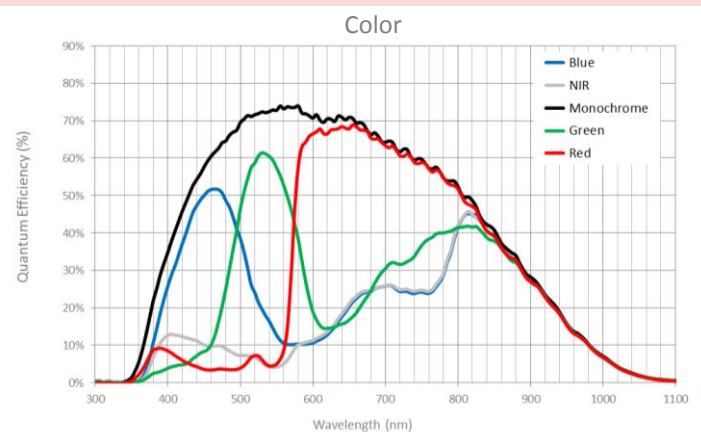
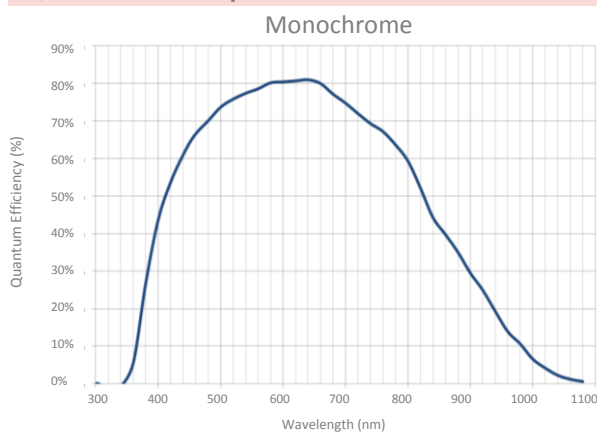
NOCTURN U3



Features

- Color or Monochrome
- Ideal for 24/7 operations
- Less than 4e-read-out noise
- 860 nm and 1064 nm laser line detection
- 1.3 Mpx up to 60 fps
- Digital Zoom up to 8x

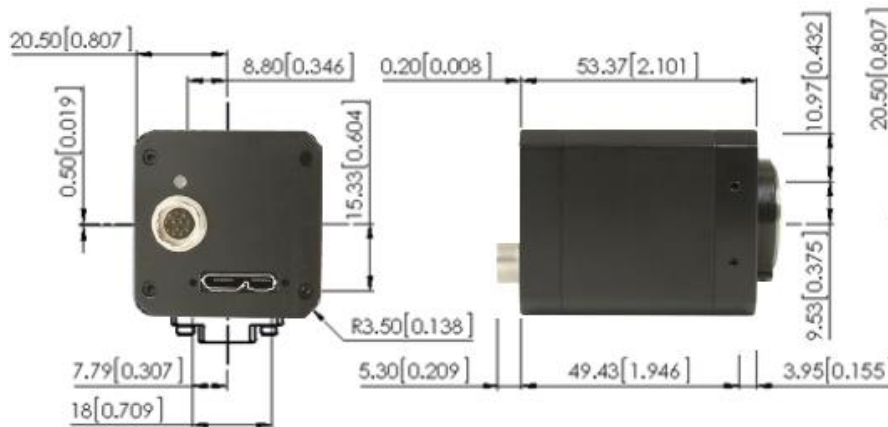
Camera	Specifications
Resolution	1280 x 1024 Pixels
Pixel Pitch	9.7 μm x 9.7 μm
Well Capacity	> 25000 e-
Dynamic Range	> 60 dB
Read Noise	< 4e- median at 60 Hz
Frame Rate	50 or 60 Hz with full field resolution (user selectable)
Image Lag	< 0.1%
Shutter Mode	Rolling
Features	
Imaging Start Up Time	< 10 seconds
On-screen Display	Full on-screen display capability with text, standard geometrical shapes and graphics
Image Correction	Bad pixel replacement and 2 points non-uniformity correction (NUC)
Gain Control	Automatic gain and exposure control or manual
Digital Zoom	Up to 8X (0.001 increment resolution)
Color/Monochrome image	Full color to ~200mLx; auto-switch to monochrome User-selectable monochrome for all light conditions
Contrast Enhancement	Contrast stretching, equalization and adaptive equalization
Housing	
Lens Mount	CS-mount
Dimensions (excluding connectors) (Width x Height x Depth)	41 x 41 x 58 mm
Weight	< 150g
Quantum Efficiency	





Input/Output	
Digital Video Output	Monochrome: Monochrome 8/10 bit over USB3 Color: Monochrome 8/10 bit over USB3 or 24-bit YCbCr or YUV (4:2:2 format) over USB3
Communications	Serial via external interface or Micro-B USB 3.0
Synchronization via USB3 serial	Frame start trigger (2 to 12 V) Analog output strobe reference (2 to 12V)
Environmental and Power	
Operating Temperature	0°C to +50°C
Storage Temperature	-50°C to +80°C
Input Voltage	USB powered
Power (typical)	60/50 Hz mode: 3.5 W

Mechanical Dimensions for U3 Camera Body (in mm)



NOCTURN U3 Camera is powered by the KAMELEON Color CMOS imaging sensor, or the LYNX CMOS monochrome sensor, both optimized for low light level imaging.

The KAMELEON Color and LYNX Monochrome CMOS imaging sensors are the first operational sensors specifically designed with Night Vision, Homeland Security and Surveillance applications in mind.

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

Both LYNX and KAMELEON CMOS imaging sensors provide full SXGA resolution at 100 frames per second, with < 4e- read out noise and without cooling.

