

HIGHLY SENSITIVE LOW LIGHT
CAMERA CORE

PHOTONIS
EXOSENS GROUP

Nocturn Series



*HIGH RESOLUTION LOW LIGHT
CAMERA IN THE VISIBLE & NIR*

KEY FEATURES



LOW LIGHT CMOS SENSOR



UP TO 100 FPS



DAY & NIGHT IMAGING



**LASER DETECTION
(860nm & 1064nm)**

The Nocturn series is ruggedized passive low-light camera that features high-definition, high sensitivity and high dynamic range with low power consumption

Its small size, weight and power (SWaP) makes these camera cores ideal for integration into aerial, vehicle and hand-held surveillance systems

The Nocturn series is available in different video interfaces such as HD-SDI, CameraLink or PAL/NTSC, USB 3.0 and LVCMOS

Nocturn Series

**LOW READ NOISE
(LESS THAN $4e^-$)**



**HIGH DYNAMIC
RANGE**



VARIOUS VIDEO INTERFACES



HD-SDI



**CameraLink
or PAL/NTSC**



LVC MOS



USB 3.0



KEY PERFORMANCE

Sensor	CMOS low light sensor in monochrome or color
Resolution	1280 x 1024 pixels
Pixel Pitch	9.7 μm x 9.7 μm
Spectral Range	350 – 1100 nm
Frame Rate	Up to 100 fps
Sensitivity	Full daylight to quarter moon condition (NL3)

FUNCTIONS & INTERFACES

Image enhancement	Non-uniformity correction, noise removal, sharpening
Image processing	Noise removal, sharpening, contrast enhancement
Digital Zoom	Up to 8x (depend on type)
Video output	HD-SDI / CameraLink, PAL-NTSC / LVC MOS / USB 3.0
Dimensions	From 34.1 x 036.6 x 37.4 mm ³ (depend on type)
Weight	From 85 g (depend on type)
Communication	Serial over USB or TS-422

ENVIRONMENT & POWER

Operating temperature	-40°C to +60°C (depend on type)
Storage temperature	-50°C to +80°C (depend on type)
Input voltage	+5 to +12 VDC over GPIO interface

Applications

- ◆ Armored vehicles & platform sights
- ◆ Scientific instrumentation
- ◆ Advanced medical imaging
- ◆ Machine vision
- ◆ Surveillance

[▣] The data shown in the table is subject to the Nocturn type

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EXOSSENS
REVEAL THE INVISIBLE