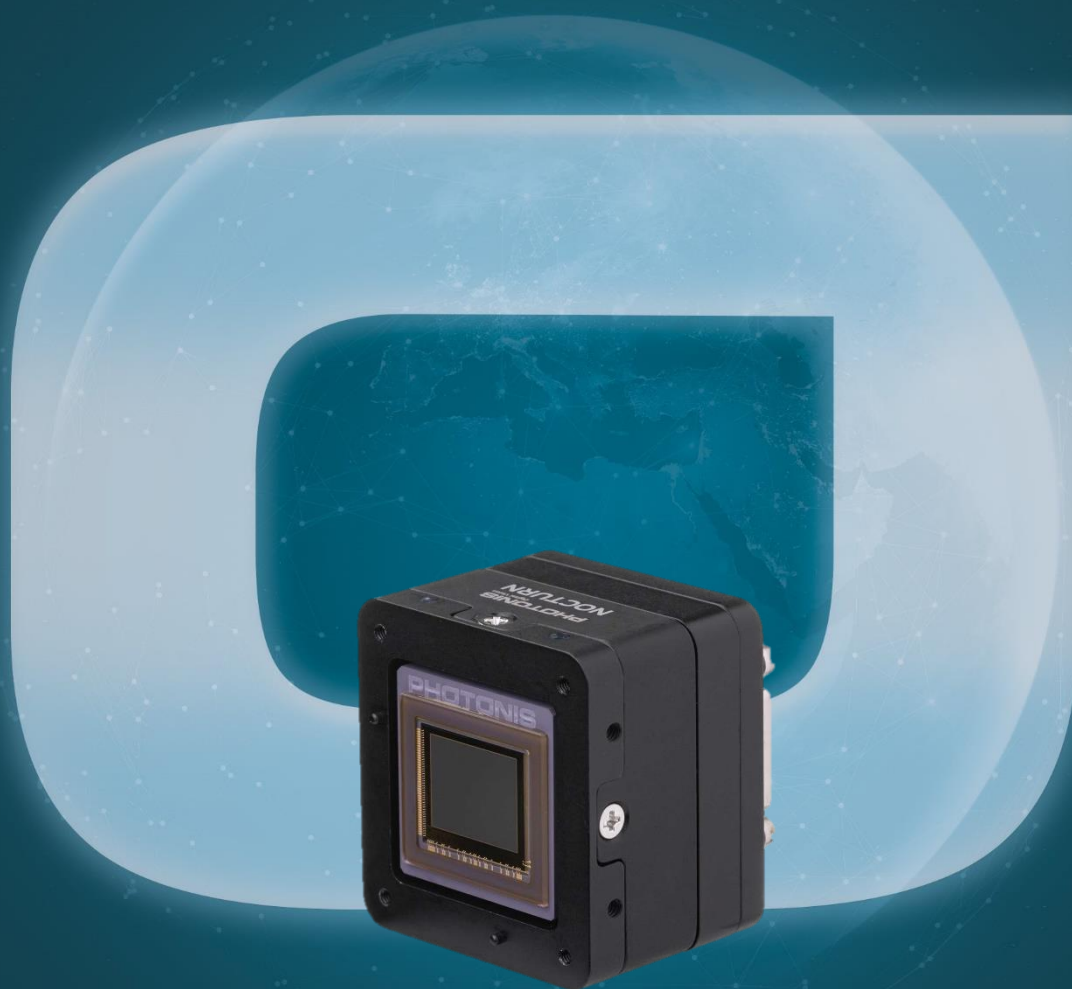


NOCTURN XL MONO

PHOTONIS
EXOSENS GROUP



ENG-SPS032_R001
SPECIFICATION SHEET

exosens.com

Disclaimer

The information furnished is believed to be accurate and reliable, but is not guaranteed and is subject to change without notice. No liability is assumed by Photonis nor by any Exosens Group companies. Performance data represents typical characteristics as individual product performance may vary. Customers should verify that they have the most current Photonis product information before placing orders. Texts and pictures may not be considered as contractually binding. This document may not be reproduced, in whole or in part, without the prior written consent of Photonis.

Copyright/Intellectual Property Rights

© Photonis Netherlands BV 2024.

All rights reserved worldwide.

This document must not, in whole or part, be copied, photocopied, reproduced, translated or transmitted to any electronic medium or machine-readable form without written permission from Photonis Netherlands BV.

Names and marks appearing on the products herein are either registered trademarks or trademarks of Photonis Netherlands BV. All other trademarks, trade names or company names referenced in this document are used for identification only and are the property of their respective owners.

Quality Assurance

The Quality Management System under which these products are developed and manufactured has been certified in accordance with the ISO 9001 standard.

Photonis Netherlands BV is committed to a policy of continuous development for which we reserve the right to make changes and improvement on any of the products described in this manual without prior notice.

Table of Contents

1 Key technical specifications of Nocturn XL mono (Camera Link and PAL/NTSC) model	4
---	----------

List of Tables

Table 1: Key technical specifications	5
---	---

1 Key technical specifications of Nocturn XL mono (Camera Link and PAL/NTSC) model

Features	Parameters				
Camera					
Type	Nocturn XL Monochrome				
Video Output	Analog video / Camera Link				
Front Mount	CS-Mount				
Communication	Serial over USB or Camera Link				
Digital Zoom	1 – 8 X				
Image Processing	Noise removal, sharpening, contrast enhancement				
Gain and Exposure	Fully automatic or manual				
Input voltage	USB powered or external +5 to +15 VDC				
Power	1.8 W typical				
Dimensions	34.1 mm x 36.6 mm x 37.4 mm				
Weight	< 85 g				
Sensor					
Type	CMOS LYNX 1.3 MPix				
Resolution	1280 x 1024				
Pixel Pitch	9.7 µm x 9.7 µm				
Format	1" (16mm diagonal)				
Frame Rate	Up to 100 Hz full frame				
Shutter mode	Rolling Shutter				
Spectral range	350 – 1100 nm				
Read noise	< 4 e ⁻ rms				
Test operating conditions					
Camera tests					
Output board used	Nocturn XL IO board				
Operating supply voltage	+5 V over USB				
Ambient temperature	27 +/- 2°C				
Operating video output format	Camera Link 60 fps				
Performance parameter					
	Min.	Typ.	Max.	Unit	Type*
Intrascene dynamic range		60		dB	Q
Startup time		5		s	Q
Image lag			0.1	%	Q
Operability	99.5			%	A
Conversion gain			6	e ⁻ /DN	A
Dark current			800	e ⁻ /pix/s	A
Read noise			4	e ⁻	A
* Q = qualification measurement; A = ATR measurement					
Environmental limits					
Temperature, operational	-40°C to +60°C				
Temperature, storage	-50°C to +80°C				

exosens.com

Shock	500 G, 0.5 ms				
Vibration	2 Grms, 5 – 55 Hz, Random				
Image defects	Region				
	1	2	3	4	5
Bad rows	0	0	0	0	0
Bad columns	2	1	0	0	1
Type 2 Cluster	25	8	5	2	8
Type 3 Cluster	10	4	2	0	4
Type 4 Cluster	0	0	0	0	0
Default settings					
Framerate 1	60 fps				
Framerate 2	50 fps				
(For internal reference: PHO-000002, ASY-002184, pDCNC007_01, 184-D071A0)					

Table 1: Key technical specifications

Photonis Netherlands BV

Dwazziewegen 2, 9301 ZR, Roden

The Netherlands

T +31 050 501 8808

advancedimaging@exosens.com

EXOSENS
REVEAL THE INVISIBLE



[exosens.com](https://www.exosens.com)

© Photonis. The information furnished is believed to be accurate and reliable, but is not guaranteed and is subject to change without notice. No liability is assumed by Photonis nor by any Exosens Group companies. Performance data represents typical characteristics as individual product performance may vary. Customers should verify that they have the most current Photonis product information before placing orders. Texts and pictures may not be considered as contractually binding. This document may not be reproduced, in whole or in part, without the prior written consent of Photonis.