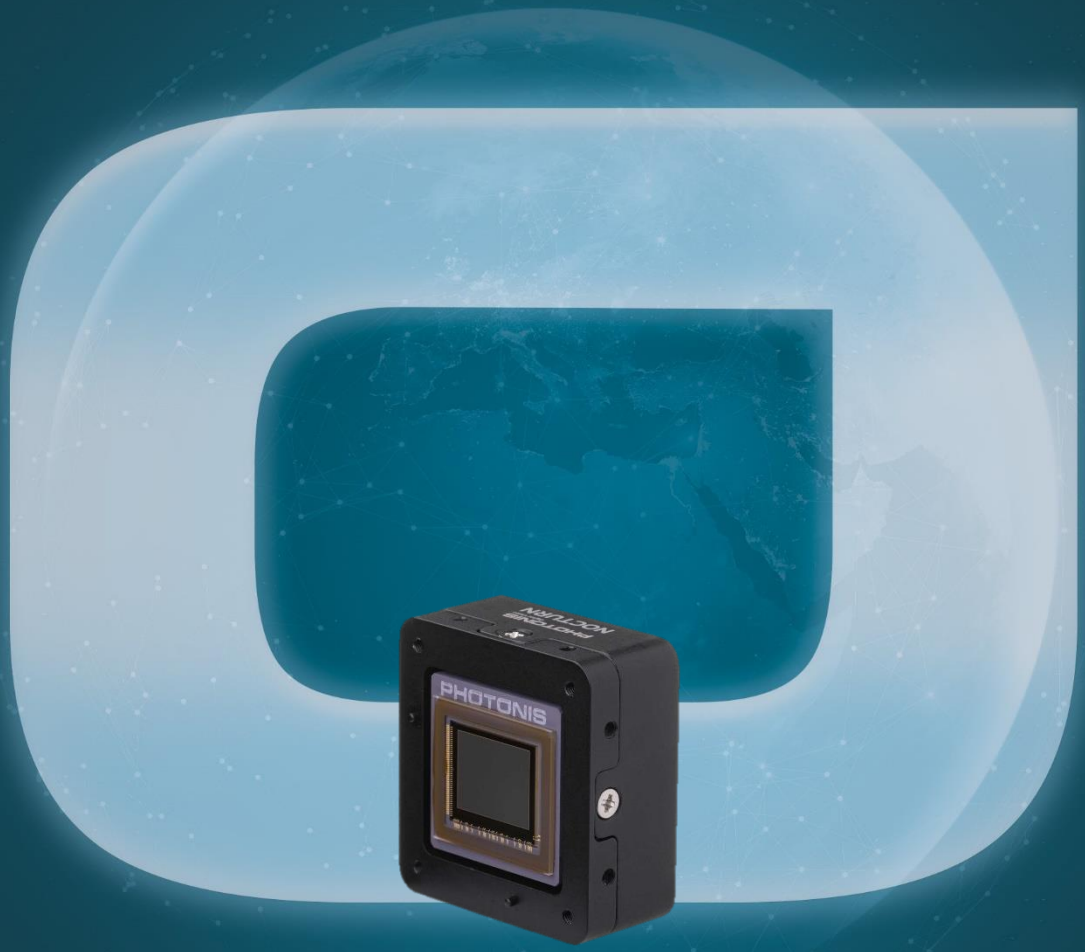
NOCTURN XS COLOR

PHOTONIS
EXOSENS GROUP



ENG-SPS034_R001

SPECIFICATION SHEET

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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.

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1 Key technical specifications of Nocturn XS color (Parallel LVCMOS) model

Features	Parameters				
Camera					
Type	Nocturn XS Colour				
Video Output	Parallel LVCMOS				
Front Mount	Thread 1-72				
Communication	Serial				
Digital Zoom	1 – 8 X				
Image Processing	Noise removal, sharpening, contrast enhancement				
Gain and Exposure	Fully automatic or manual				
Input Voltage	4.5 VDC fixed or variable 2.5 VDC to 5.5 VDC				
Power	1.5 W typical				
Dimensions	34 mm x 37 mm x 18 mm				
Weight	< 45 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				

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-000004, DCNC004_01, 184-D073A0)					

Table 1: Key technical specifications

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