Allied Vision

EXO USB3

exo4000MU3

Allgemein

Modell	exo4000MU3
Produktcode	F001627
Produktserie	EXO USB3
Status	Available

Sensor

Sensortyp	Area scan
Chroma	Mono
Spektrum	Visible
Spektralbereich	400 nm to 1000 nm
Auflösung	2,048 × 2,048 (4.00 MP)
Sensormodell	CMOSIS/ams CMV4000
Sensorarchitektur (Material)	cmos
Verschlusstyp(en)	Global shutter (GS)
Sensorgröße	11.26 × 11.26 mm (15.93 mm, Type 1)
Pixelgröße	5.50 µm × 5.50 µm

Pixelformate

Sensor-Bittiefe	8-bit, 12-bit
Monochrome Pixelformate	mono8, mono12packed

Bildgebungsleistung

Dynamikbereich	52 dB
SNR	38 dB

Timing und Verstärkung

Max. Bildrate	74 fps
Belichtungszeit	27 µs to 10 s
Verstärkung	0.0 dB to 11.0 dB

I/Os und Stromversorgung

Nicht-isolierte Leitungen	0 x LVDS input, 0 x LVDS output, 0 x TTL input, 0 x TTL output, 2 x 24V input, 4 x Open drain output,
Spezifische nicht-isolierte Leitungen	1 x RS232 input, 1 x RS232 output, 0 x RS422 input, 0 x RS422 output,
Optisch isolierte Leitungen	1 x Optical isolated input, 0 x Optical isolated input,
I/O-Anschluss	12-pin Hirose HR10A-10P-12S
Stromversorgung	10 to 25VDC
Stromverbrauch	External: 4.5 W (typical)

Mechanische Eigenschaften

Gehäuseabmessungen (L x B x H in mm)	47 × 50 × 50
Filter-/Schutzglas	K9 - AR coating - 400-850nm
IP-Klasse	IP40
Objektivanschluss/-anschlüsse	C-Mount
Gewicht	138 g

Onboard-Speicher und FPGA

Bildpuffer (RAM)	192 MByte
Nichtflüchtiger Speicher (Flash)	32 MByte

Schnittstellen

Digitale Schnittstelle	usb3.0
Schnittstellenanschluss	(Micro-B)
Vision-Standard	USB3 Vision

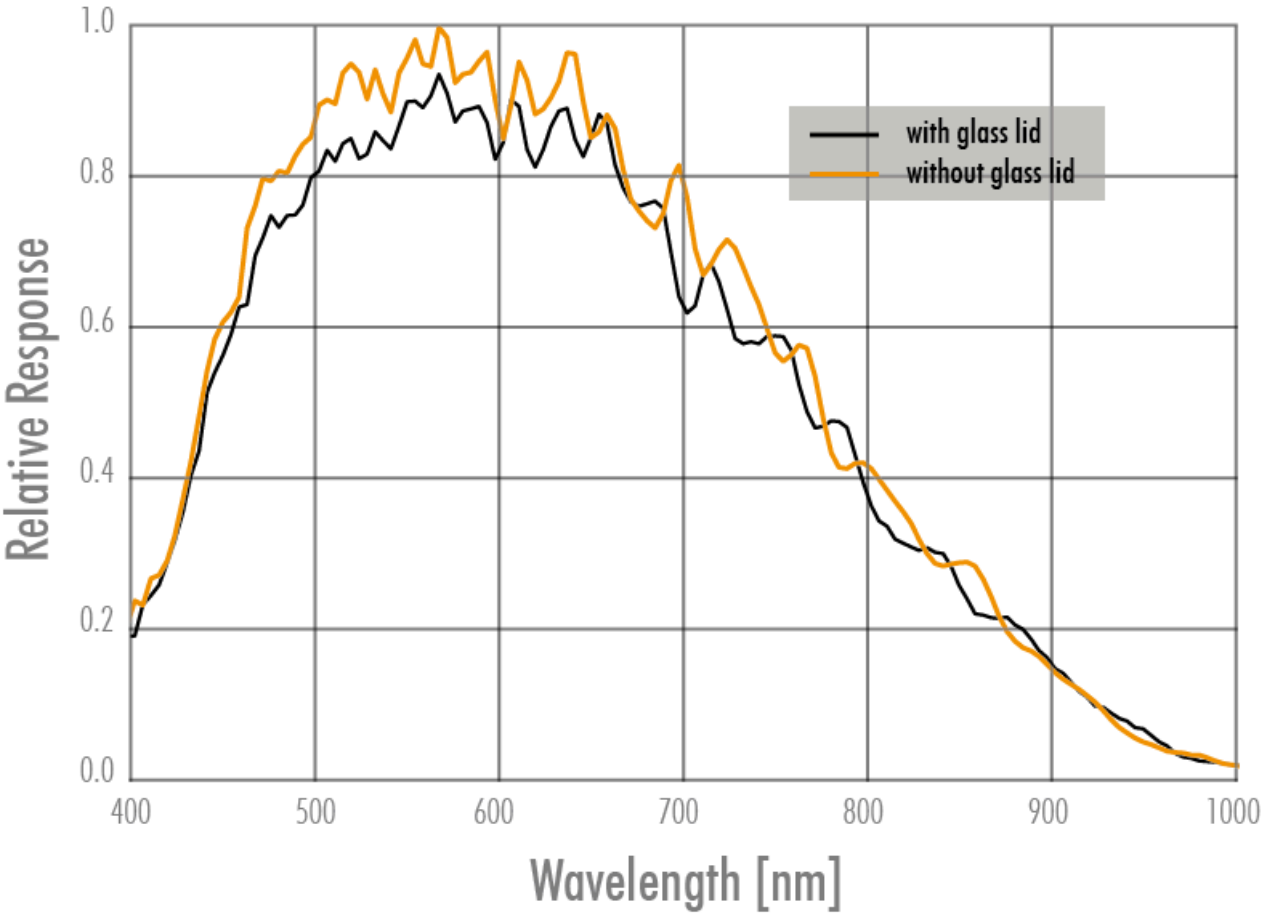
FW-Funktionen – Bildsteuerung

Belichtungsmodi	manual, auto, external
Verstärkungsmodi	auto, manual
Bildsteuerungsfunktionen	roi, lut, mirror-image, dpc, shading-correction

FW-Funktionen – Kamerasteuerung

Triggermodi/Synchronisation	internal, software, external
Kamerasteuerungsfunktionen	User Sets, PWM(4), Sequencer,

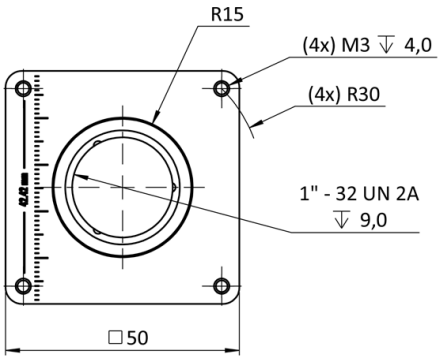
Quanteneffizienz



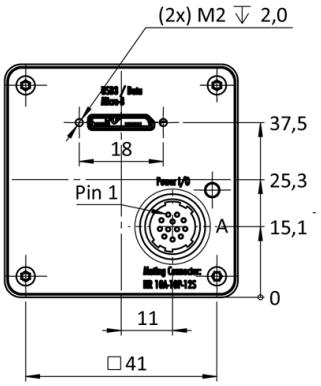
Allied Vision

Technische Zeichnung

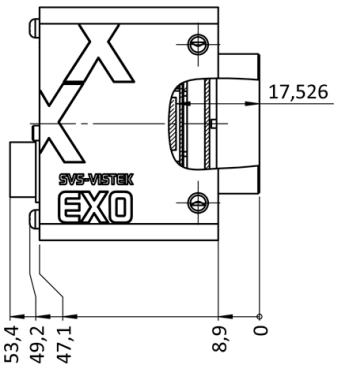
front



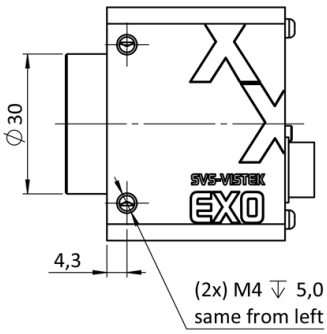
back



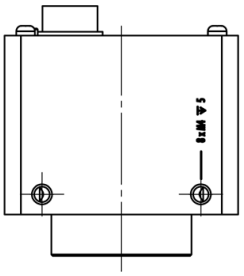
cross section



right side



top



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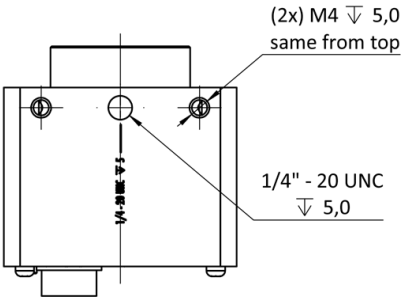
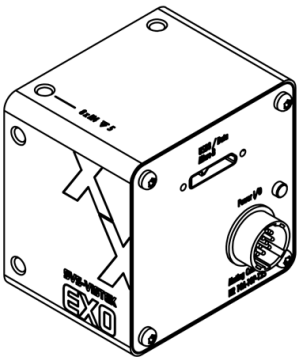
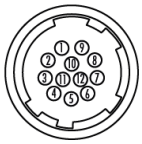




I/O-Pin-Belegung

Hirose 12 Pin



1	VIN –	(GND)	7	OUT 1	(open drain)
2	VIN +	(10 V to 25 V DC)	8	OUT 2	(open drain)
3	IN 4	(RXD RS232)	9	IN 3 +	(opto In +)
4	OUT 4	(TXD RS232)	10	IN 3 –	(opto In –)
5	IN 1	(0 - 24V)	11	OUT 3	(open drain)
6	IN 2	(0 - 24V)	12	OUT 0	(open drain)