

Messen

Prüfen

Kontrollieren

Sortieren

Positionieren

Vollständigkeitskontrolle

Vorhandenseinskontrolle

Oberflächeninspektion

Teileprüfung

Werkzeugvoreinstellung

3D Sehen

3D Erkennung

Robot Vision

Markierungskontrolle

Koplanarität

BGA-Prüfung

Konturprüfung

Fehler- und  
Verschmutzungserkennung

OCR / OCV

Zeichenerkennung

Code Lesen

Faden- und Stoffprüfung

Papier- und Folienprüfung

Metallprüfung

Displayprüfung LCD, LED,  
OLED

Mustervergleich

Blasenkontrolle

Robotersteuerung

Bohrer Vermessung

Thermografie

Plastik-Inspektion

2D

**und vieles mehr...**

## Product data:

# EyeScan AT 3D SH



## Description:

The EyeScan AT 3D sensor is specially suitable for the scanning of metal or reflecting surfaces.

The EyeScan AT 3D Blue uses a blue laser technology, and therefore provides better scan results, because a blue laser has a shorter wave length than a red laser. Therefore the blue laser reduces the noise of up to 50 %.

When scanning metal the shorter wavelength leads to a sharper image depth. The blue laser more fine-grained than a red laser especially on metal.

Thanks to the 20.000 profiles per second and the blue laser, even complicated component parts and surfaces can be scanned with high resolution. Extremely fast scans are possible due to the shorter exposure time.

The EyeScan AT 3D is also faster due to the laser class 3, preprocessing of the data with FPGA, etc.

Additionally the High Dynamic Range allows to inspect dark and light objects in the same scan, without having to reduce the speed.

More information on our Website: [www.evt-web.com](http://www.evt-web.com).

Please do not hesitate to contact us if you have any questions:

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**info@evt-web.com**

## Technical Data:

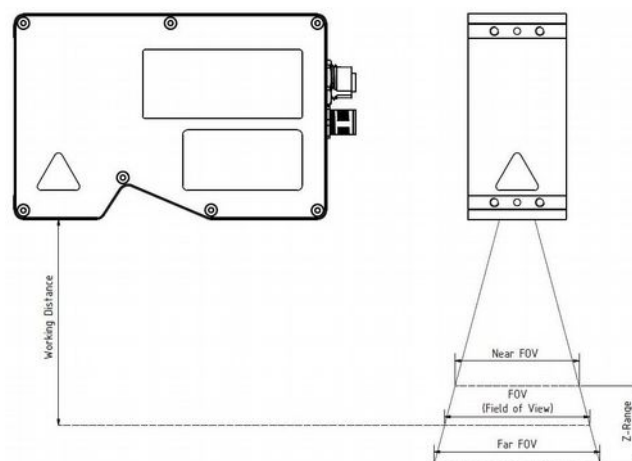
### Sensor Specification:

Parameter		Sensor Specification				
Sensor Type		CMOS				
Shutter Type		Global Shutter				
Resolution (line x column) in pixel		1280 x 1024	1600/2048 x 1088	3360 x 2496	4096 x 3072	
Sensor ADC resolution		12 Bit		10 Bit		
Sensor Dynamic Range		90 dB mit HDR				
Max. Profile Rate at max. line width		116000 Hz	25000 Hz	10000 Hz	14500 Hz	
Effective Profile Rate (Hz) at max. line width	Number of lines (example)	Effective Frame / Profile Rate (Hz)				
		1280 Pixel	688 Pixel			
	8	116000	192000	25000	10000	14500
	16	63000	110000	16000	8000	9700
	32	32800	59050	9540	5400	5800
	64	16780	30700	5240	3280	3200
	128	8480	14700	2700	1800	1700
	256	4260	7400	1400	970	900
	512	2140	3970	723	500	450
	1024	1070	1860	358	255	225
2048	-	-	180	128	113	
3072	-	-	-	-	75	

<b>Profile Speed</b>	up to 25000 Hz (depending on the model)
<b>Profile Resolution</b>	up to 4096 points / Profile (depending on the model)
<b>Interfaces</b>	GigE Vision / GenICam
<b>Dynamic Range</b>	90 dB (with HDR-3D)
<b>Connector</b>	M12
<b>Protection Class</b>	IP67
<b>Laser Safety Class</b>	2M, 3R, 3B
<b>Sensor Algorithms</b>	MAX, TRSH, COG, FIR-PEAK
<b>Digitale IOs</b>	Opto-isolated Inputs (2x) / Outputs (2x), Trigger, Encoder (RS442)
<b>Power supply</b>	10 – 24V DC
<b>PC requirements</b>	Gigabit Ethernet NIC

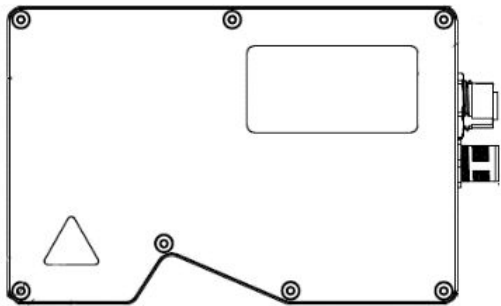
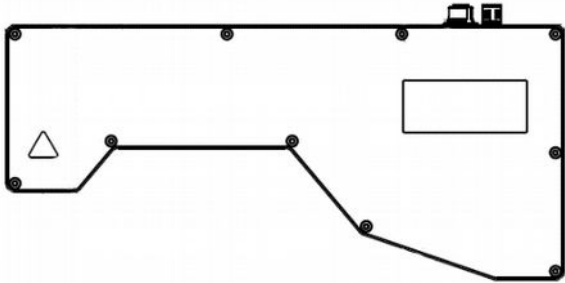
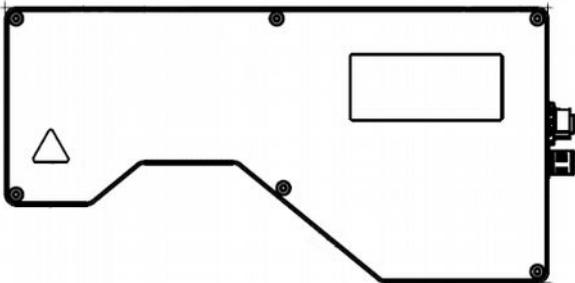
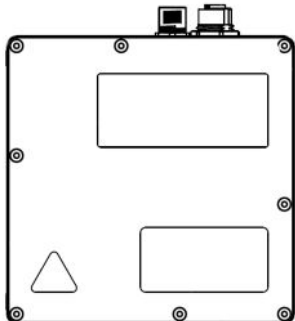
## EyeScan AT 3D Modelle:

Model EyeScan AT 3D	FOV [mm]	Z-Range [mm]	Lateral Resolution [ $\mu\text{m}$ ]	Height Resolution [ $\mu\text{m}$ ]	Working Distance [mm]	Points per Profile
C5-1600CS23-30	30	$\pm 20$	19	0,8	106	1600
C5-20140CS23-38	38	$\pm 20$	19	0,8	106	2048
C5-1600CS23-49	49	$\pm 20$	31	1,2	106	1600
C5-2040CS23-63	63	$\pm 20$	31	1,2	106	2048
C5-3360CS39-67	67	$\pm 7,5$	20	0,5	172	3360
C5-1600CS23-78	78	$\pm 20$	49	2,0	106	1600
C5-2040CS23-100	100	$\pm 20$	49	2,0	106	2048
C5-3360CS30-150	150	$\pm 100$	45	1,4	398	3360
C5-4090CS30-182	182	$\pm 125$	44	1,4	398	4096
C5-3360CS19-248	248	$\pm 250$	74	3,6	685	3360
C5-3360CS30-255	255	$\pm 150$	76	2,4	398	3360
C5-1600CS30-260	260	$\pm 150$	163	5,1	398	1600
C5-4090CS19-302	302	$\pm 250$	74	3,6	685	4096
C5-4090CS30-310	310	$\pm 150$	76	2,4	398	4096
C5-2040CS30-330	330	$\pm 150$	161	5,0	398	2048
C5-3360CS30-406	406	$\pm 150$	121	3,8	398	3360
C5-3360CS18-420	420	$\pm 400$	125	6,3	742	3360
C5-4090CS30-495	495	$\pm 150$	121	3,8	398	4096
C5-1600CS19-500	500	$\pm 250$	313	15,0	685	1600
C5-4090CS18-510	510	$\pm 400$	125	6,3	742	4096
C5-2040CS19-640	640	$\pm 250$	313	15,0	685	2048
C5-3360CS18-691	691	$\pm 400$	206	10,4	742	3360
C5-1600CS18-825	825	$\pm 400$	516	26,1	742	1600
C5-4090CS18-842	842	$\pm 400$	206	10,4	742	4096
C5-2040CS18-1060	1060	$\pm 400$	518	26,2	742	2048
C5-2040CS14-160	160	80	78	5	197	2048

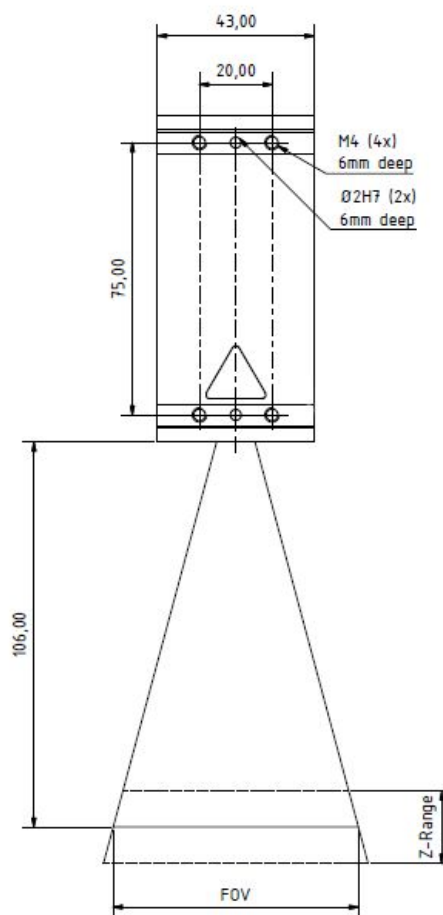
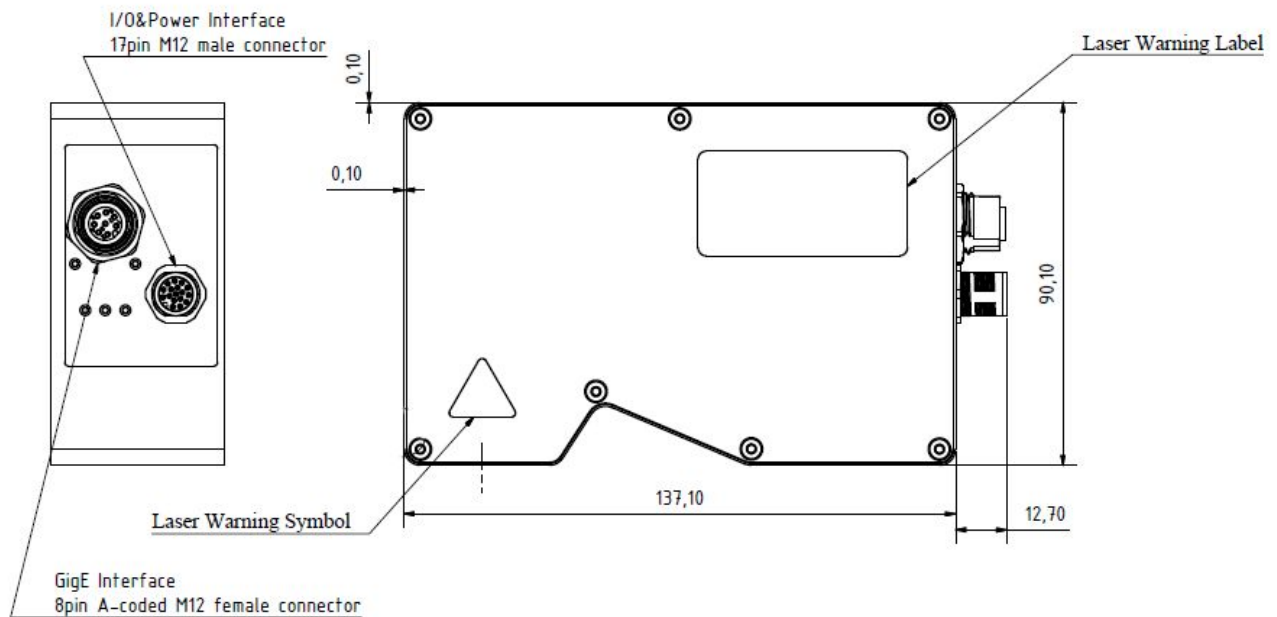


# Mechanical Drawing

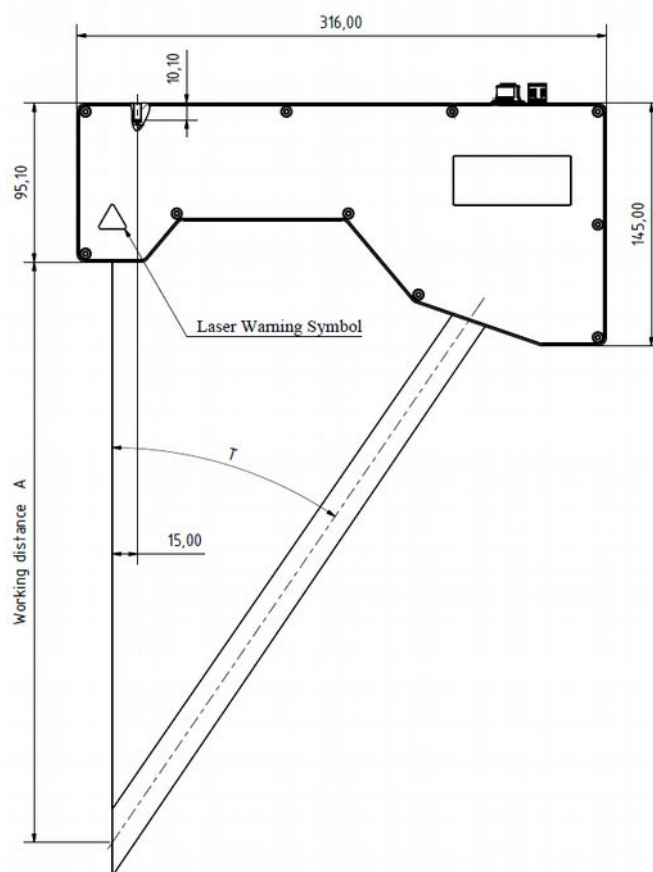
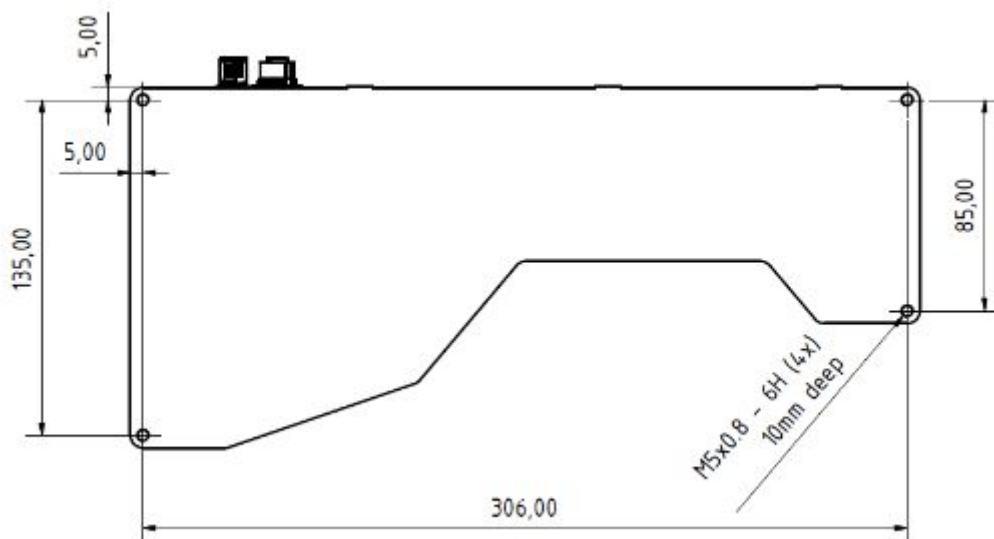
housing type

<p>Modell 1</p> 	<p>Modell 2</p> 
<p>Modell 3</p> 	<p>Modell 4</p> 

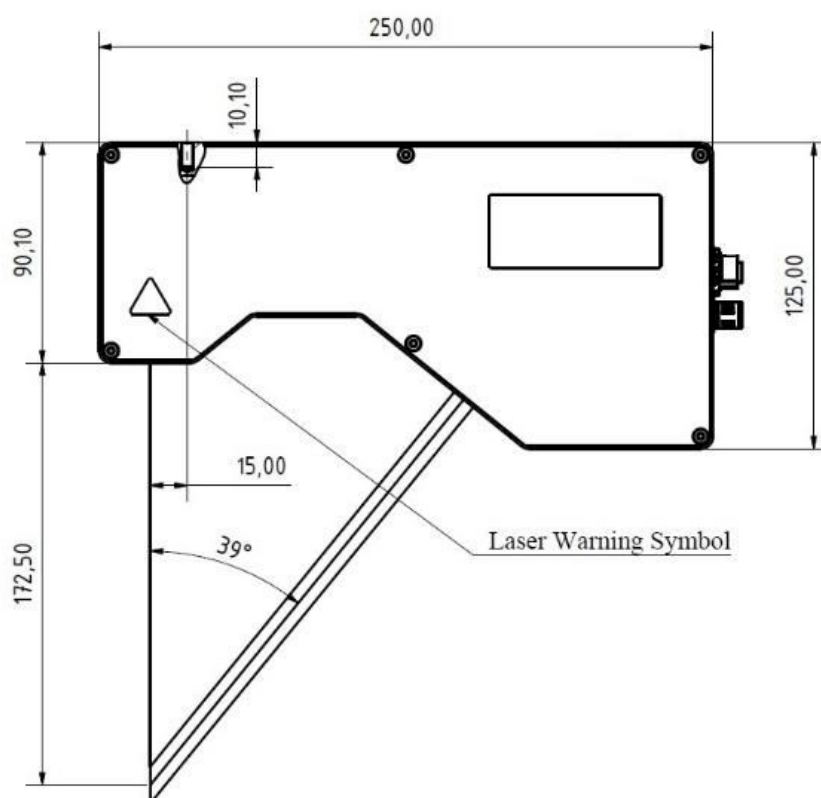
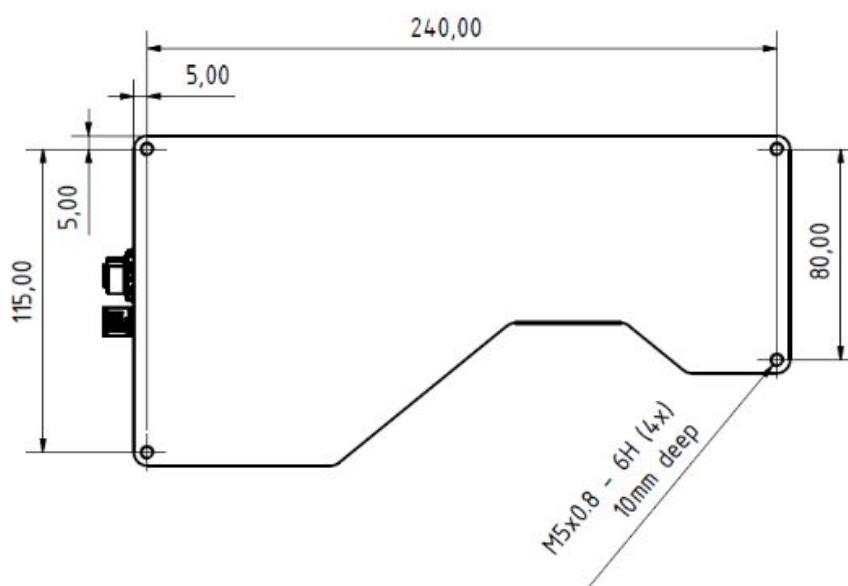
# Model 1



# Model 2



Model 3



# Model 4

