

***EVT EyeScan ST 3D***



## Index

1. Hardware.....	2
1.1 Sensor.....	3
1.2 Measurement Specification.....	3
1.3 Laser.....	3
2. Physical Interface.....	3
2.1 Input and Output signals.....	4
2.1.1 Encoder.....	4
2.2 Power.....	4
2.3 State LEDs.....	5
3. Mechanical drawing.....	5
4. Software.....	6
4.1 Parameter description.....	6

04.06.2019	Initial	THR
14.06.2019	Mechanical drawing	

## 1. Hardware

## 1.1 Sensor

Parameters	Specifications
Sensor	Sony IMX273LLR
Sensor resolution	1400*1000
Sensor ADC resolution	8/10/12 Bit

The Profile Rate is estimated by:  $PR = 10^6 / ((AOI\ height + 74) * 4) + (Exposure)$

AOI height (pixel)	Profile rate (Hz)*
4	2400
100	1250
200	800
500	400
1000	200

\*With 100us exposure and 8 Bit ADC

## 1.2 Measurement Specification

TBD

## 1.3 Laser

Color	Wavelength
Red	660nm
Blue	405nm

## 2. Physical Interface

The System has two M12 connectors.

The system can be powered over Ethernet

Type: Phoenix Contact SACC-DSI-FSX-8CON-M16-L180 SCO

Standard 1000base-T signal pinout.

Kontakt	Signal	Kontakt	Signal
1	BI_DA_P	5	BI_DC_N
2	BI_DA_N	6	BI_DB_N
3	BI_DB_P	7	BI_DD_P
4	BI_DC_P	8	BI_DD_N

## 2.1 Input and Output signals

Four isolated inputs and four outputs.

Type: Phoenix Contact SACC-DSI-MS-12CON-M12 SCO SH

Pin	Signal	Color	Pin	Signal	Color
1	PWR I/O 5-24V	BN	7	GND	BK
2	I/O GND	BU	8	Input 3	GY
3	Input 1	WH	9	PWR 12-24V	RD
4	Input 2	GN	10	Input 4	VT
5	Output 1	PK	11	Output 3	GYPK
6	Output 2	YE	12	Output	RDBU

### 2.1.1 Encoder

Input one with two can be used as encoder input A B.

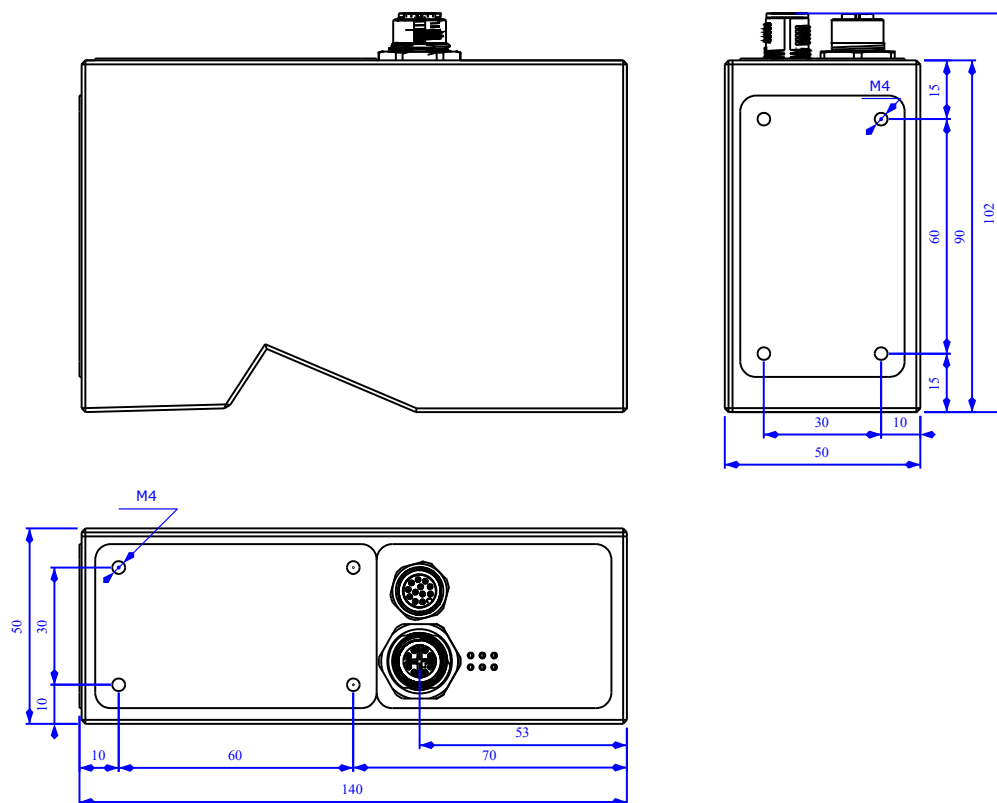
## 2.2 Power

Power requirement	PWR	12V-24V
	PWR I/O	5V-24V
Power consumption max.		7 W
Logical high min. Input	Input 1-4	5V
Logical low max. Input	Input 1-4	0.5V
Output current max.	Output 1-4	100mA

## 2.3 State LEDs

Name	Meaning
PWR	System Power
IN	Input one signal high
OUT	Output one signal high
STA	Status
RDY	Ready, system waiting or command
LSR	Laser turned off

## 3. Mechanical drawing





## **4. Software**

The Scanner is to be used with EyeVision software from version 3.9.002.

### **4.1 Parameter description**

TBD