

2D scanning systems

Sunny Technology offers scan-heads and all the models are available with housing and as a module without housing, consisting of two galvo-scanners and two driver-boards. Select 2D scanning system by aperture size, speed, accuracy and cost.

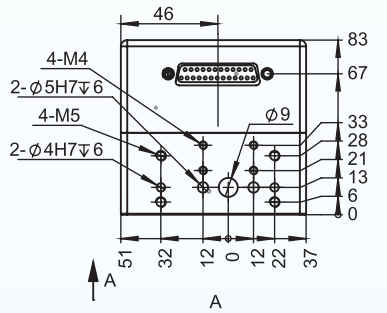


Model	SS9110D	SS9310D		SS9316D	SS9230D		SS9240D		
Aperture size(mm)	8.5	10	12	14	15	20	25	30	
Active scan angle	±12.5°								
Small step response time ⁽¹⁾ (ms)	0.19	0.2		0.3	0.35		0.52	0.6	
Tracking error (ms)	0.1	0.11		0.16	0.19		0.28	0.33	
Marking speed ⁽²⁾ (m/s)	4	4	3	3.5	3	3	1.5	1	
Positioning speed ⁽²⁾ (m/s)	19	18	12	13	10	8	6	5	
Writing speed ⁽³⁾ (cps)	good quality	1000	950	680	750	600	500	520	460
	high quality	800	750	520	600	450	360	350	300
Zero drift (μRad./°C)	<10	<10		<10	<10		<10		
Scale drift (ppm/°C)	<50	<50		<50	<50		<50		
Long-term drift over 8 hours (mrad.)	<0.5	<0.5		<0.5	<0.5		<0.5		
Linearity ⁽⁴⁾	≥99.90%	≥99.90%		≥99.90%	≥99.90%		≥99.90%		
Repeatability (μRad.)	<8	<8		<8	<8		<8		
Max. RMS current (A/axis)	3.5	1.4		3.8	4		7		
Peak current (A)	15	20		20	20		22		
Input signals	XY2-100 or Analog ±5V, ±10V								
Input power	±15/24 VDC±10% , Max. RMS 3.5A/axis								
Operating temperature	25°C±10°C								
Scan head weight (without lens) (kg)	1.2	2.1		3.1	3.3		5.4	—	
2D Module weight (kg)	0.3	0.7		1.2	1.5		—		
Typical application	Laser mark Laser therapy Research&science Coding		High speed mark Mark-on-the-fly laser Drilling Engraving		Laser mark Laser imaging Laser Radar Research&science		Trimming Laser cleaning Laser welding		Cutting Welding Rapid prototyping

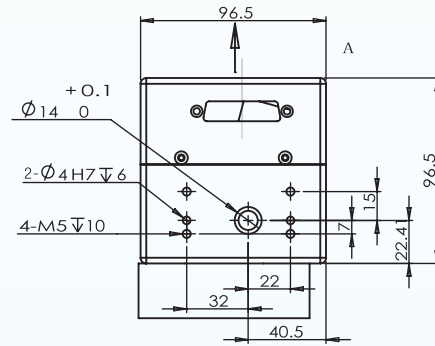
- All angles are in mechanical degrees.
- All above specifications are applicable after 60 sec warm-up.

- (1) Settling to 1% of full scale with Min. Y mirror which the scanner can carry.
(2) With F=160mm lens.
(3) With F=160mm , mark 1mm height single stroke consisting of digits and English letters.
(4) Within ±20° optical angle.

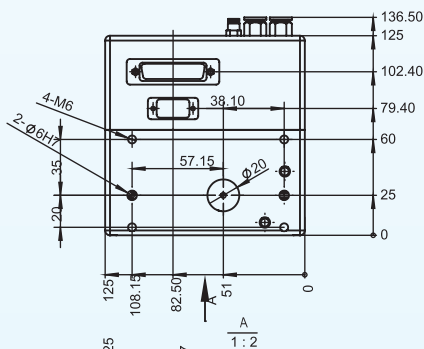
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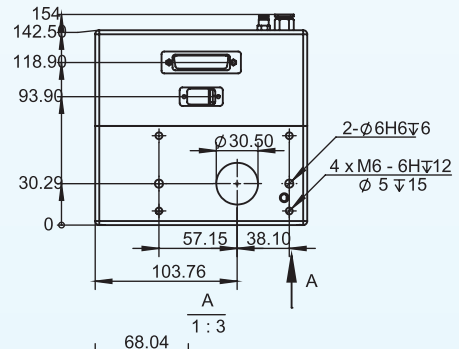
SS9110D



SS9310D



SS9230D



SS9240D

