



Specifications O^{2D}S Z (2 & 6 kHz) Scanners Preliminary



Models :	O ^{2D} S 505	O ^{2D} S 1155	O ^{2D} S 1950	O ^{2D} S 1350	
Measurement data:					
Radial / Polar distance from mirror axis	450-550 mm	1000-1300 mm	1500-2400 mm	700-2000 mm	
Minimum 10° scan arch	± 5°	± 5°	± 5°	± 5°	
Depth of Field (X)	98 mm	295 mm	890 mm	1292 mm	
Field of View close end (Y)	79 mm	175 mm	262 mm	123 mm	
Field of View far end (Y)	95 mm	226 mm	418 mm	348 mm	
Maximum 50° scan arch	± 25°	± 25°	± 25°	± 25°	
Depth of Field (X)	48 mm	178 mm	675 mm	1113 mm	
Field of View close end (Y)	419 mm	932 mm	1398 mm	652 mm	
Field of View far end (Y)	464 mm	1098 mm	2028 mm	1688 mm	
Radial / Polar Resolution	0.05 mm	0.2 mm	0.6 mm	0.8 mm	
Radial / Polar Reproducibility	± 0.05 mm	± 0.2 mm	± 0.6 mm	± 0.8 mm	
Radial / Polar Linearity	± 0.10 mm	± 0.5 mm	± 1.2 mm	± 1.6 mm	
Updating frequency	2000 Hz or 6000 Hz	2000 Hz or 6000 Hz	2000 Hz or 6000 Hz	2000 Hz or 6000 Hz	
Scan rate (from one side to the other for 2 kHz model)	600 or 300 scans/min.	600 or 300 scans/min.	600 or 300 scans/min.	600 or 300 scans/min.	
Angular resolution at Minimum 10° scan arch (2 kHz)	< 0.08° or < 0.04°	< 0.08° or < 0.04°	< 0.08° or < 0.04°	< 0.08° or < 0.04°	
Angular resolution at Maximum 50° scan arch (2 kHz)	< 0.4° or < 0.2°	< 0.4° or < 0.2°	< 0.4° or < 0.2°	< 0.4° or < 0.2°	
Scan rate (from one side to the other for 6 kHz model)	1800, 900 or 450 scans/min.	1800, 900 or 450 scans/min.	1800, 900 or 450 scans/min.	1800, 900 or 450 scans/min.	
Angular resolution at Minimum 10° scan arch (6 kHz)	< 0.08° < 0.04° or < 0.02°	< 0.08° < 0.04° or < 0.02°	< 0.08° < 0.04° or < 0.02°	< 0.08° < 0.04° or < 0.02°	
Angular resolution at Maximum 50° scan arch (6 kHz)	< 0.4° < 0.2° or < 0.1°	< 0.4° < 0.2° or < 0.1°	< 0.4° < 0.2° or < 0.1°	< 0.4° < 0.2° or < 0.1°	
Temperature deviation	± 0.03% FS/C°	± 0.03% FS/C°	± 0.03% FS/C°	± 0.03% FS/C°	
Light source (nm)	LASER (655)	LASER (655)	LASER (655)	LASER (655)	
Size of spot	Ø 1 mm	Ø 4 mm	Ø 5 mm	Ø 5 mm	
Laser protection class	IEC 2 or 3R	IEC 3R or 3B	IEC 3R or 3B	IEC 3R or 3B	
Electrical data:		Environment data:		Physical data:	
Serial output: 2 kHz / 6 kHz	RS232 / RS422	Operating temperature	0 - +45 C°	Dimensions	310 x 190 x 64 mm
Baud rate: 2 kHz / 6 kHz	115200 / 230400	Storage temperature	-20 - +70 C°	Weight excl. Cable	4.2 kg
Supply voltage	22 - 36 VDC	Humidity non condensing	Max 90 % RH	Cable length	2.5 m
Power consumption, max	12 W	Degree of protection	IEC IP65	Housing	Aluminum & Glass windows

Models :	O ^{2D} S 250	O ^{2D} S 325	O ^{2D} S 450	O ^{2D} S 750	
Measurement data:					
Radial / Polar distance from mirror axis	200-300 mm	200-450 mm	200-700 mm	400-1100 mm	
Standard 10° scan arch	± 5°	± 5°	± 5°	± 5°	
Dept of Field (X)	98 mm	248 mm	497 mm	695 mm	
Field of View close end (Y)	35 mm	35 mm	35 mm	70 mm	
Field of View far end (Y)	52 mm	78 mm	121 mm	191 mm	
Maximum 50° scan arch	± 25°	± 25°	± 25°	± 25°	
Dept of field (X)	72 mm	207 mm	434 mm	597 mm	
Field of View close end (Y)	186 mm	186 mm	186 mm	372 mm	
Field of View far end (Y)	253 mm	379 mm	591 mm	928 mm	
Radial / Polar Resolution *)	0.03 mm	0.05 mm	0.1 mm	0.2 mm	
Radial / Polar Reproducibility *)	± 0.03 mm	± 0.05 mm	± 0.1mm	± 0.2 mm	
Radial / Polar Linearity *)	± 0.10 mm	± 0.20 mm	± 0.2 mm	± 0.4 mm	
Updating frequency	2000 Hz or 6000 Hz	2000 Hz or 6000 Hz	2000 Hz or 6000 Hz	2000 Hz or 6000 Hz	
Scan rate (from one side to the other for 2 kHz model)	600 or 300 scans/min.	600 or 300 scans/min.	600 or 300 scans/min.	600 or 300 scans/min.	
Angular resolution at Minimum 10° scan arch (2 kHz)	< 0.08° or < 0.04°	< 0.08° or < 0.04°	< 0.08° or < 0.04°	< 0.08° or < 0.04°	
Angular resolution at Maximum 50° scan arch (2 kHz)	< 0.4° or < 0.2°	< 0.4° or < 0.2°	< 0.4° or < 0.2°	< 0.4° or < 0.2°	
Scan rate (from one side to the other for 6 kHz model)	1800, 900 or 450 scans/min.	1800, 900 or 450 scans/min.	1800, 900 or 450 scans/min.	1800, 900 or 450 scans/min.	
Angular resolution at Minimum 10° scan arch (6 kHz)	< 0.08° < 0.04° or < 0.02°	< 0.08° < 0.04° or < 0.02°	< 0.08° < 0.04° or < 0.02°	< 0.08° < 0.04° or < 0.02°	
Angular resolution at Maximum 50° scan arch (6 kHz)	< 0.4° < 0.2° or < 0.1°	< 0.4° < 0.2° or < 0.1°	< 0.4° < 0.2° or < 0.1°	< 0.4° < 0.2° or < 0.1°	
Temperature deviation	± 0.03% FS/C°	± 0.03% FS/C°	± 0.03% FS/C°	± 0.03% FS/C°	
Light source (nm)	LASER (655)	LASER (655)	LASER (655)	LASER (655)	
Size of spot	Ø 1 mm	Ø 2 mm	Ø 3 mm	Ø 3 mm	
Laser protection class: 2 kHz / 6 kHz	IEC 2 / IEC 2	IEC 2 / IEC 2	IEC 2 / IEC 3R	IEC 2 / IEC 3R	
Electrical data:		Environment data:		Physical data:	
Serial output : 2 kHz / 6 kHz	RS232 or RS422	Operating temperature	0 - +45 C°	Dimensions	310 x 190 x 64 mm
Baud rate : 2 kHz / 6 kHz	115200 / 230400	Storage temperature	-20 - +70 C°	Weight excl. Cable	4.2 kg
Supply voltage	22 - 36 VDC	Humidity non condensing	Max 90 % RH	Cable length	2.5 m
Power consumption, max	12 W	Degree of protection	IEC IP65	Housing	Aluminum & Glass windows

*) Static measurement on white paper without any averaging of the output signals, sampling and output frequency being equal.

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Gordy's Sensors

5772 Smaller Rd, Johnstown, OH 43031 Phone: (740) 967-2283 Fax: (740) 967-2855
 Website: www.gordyssensors.com or Email: sales@gordyssensors.com