



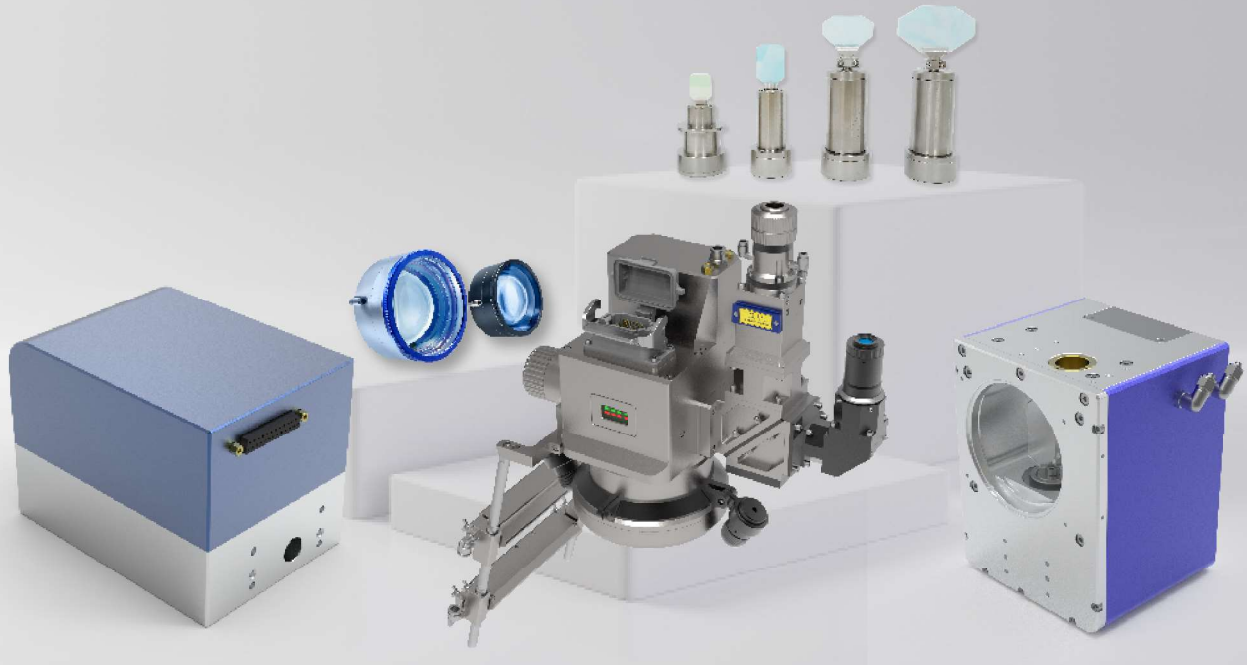
Ingenuity Ouya | Innovation from the beginning

Shenzhen Ouya Laser Intelligent Technology Co., Ltd

Tel: 0755-27534177

Web: www.ouyaauto.com

Add: 2nd Floor, Building B, New Second Industrial Zone, No. 32, Nanling Road, Xinqiao Street, Baoan District, Shenzhen



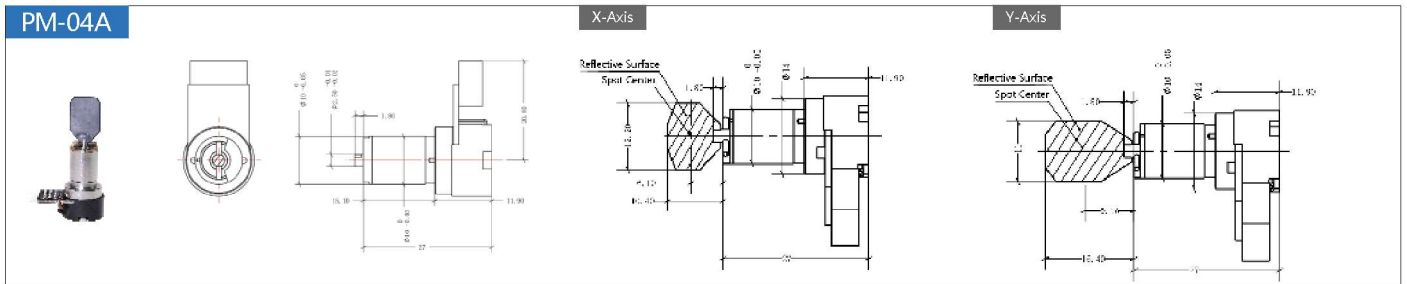
Ouya Laser Product Manual

Professional Galvanometer Scanner Manufacturer

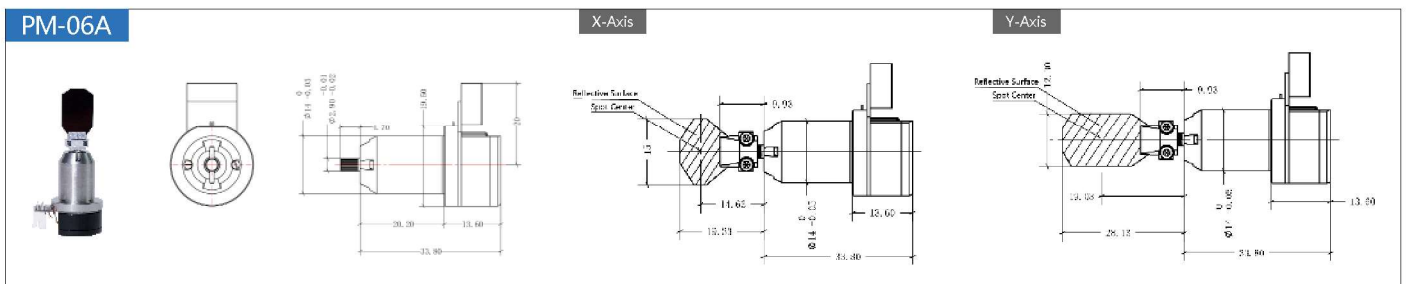
Shenzhen, China

PM series photogalvanometer

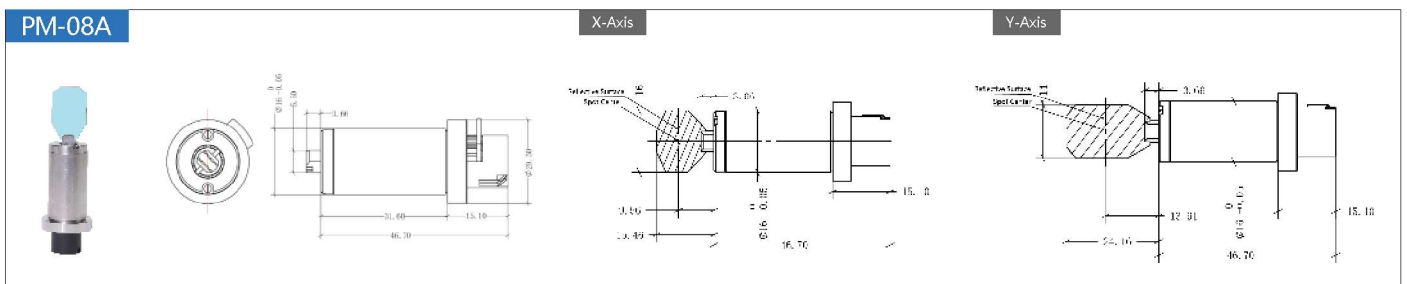
PM-04A



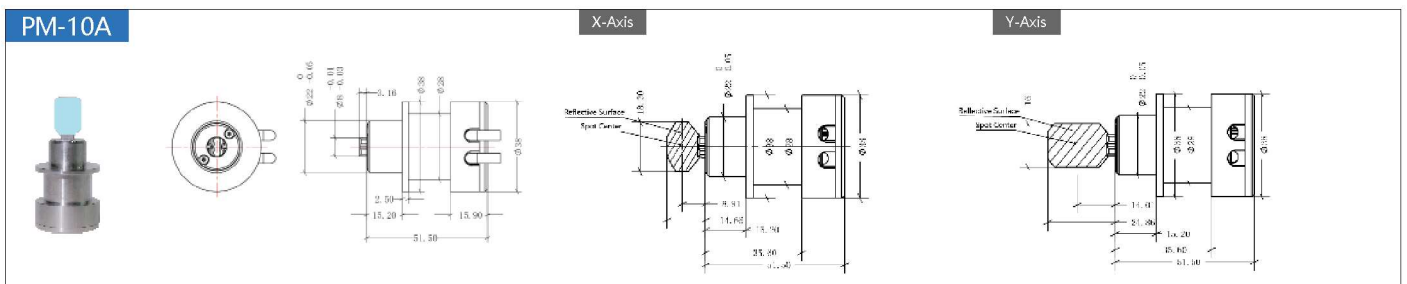
PM-06A



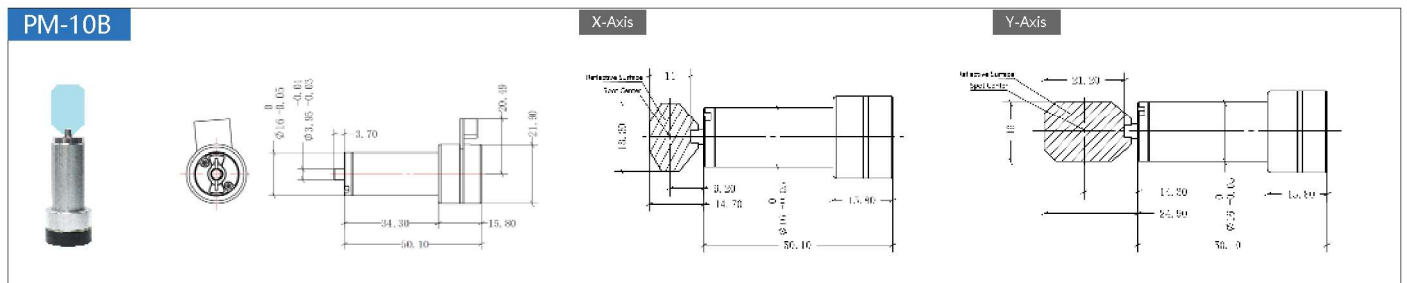
PM-08A



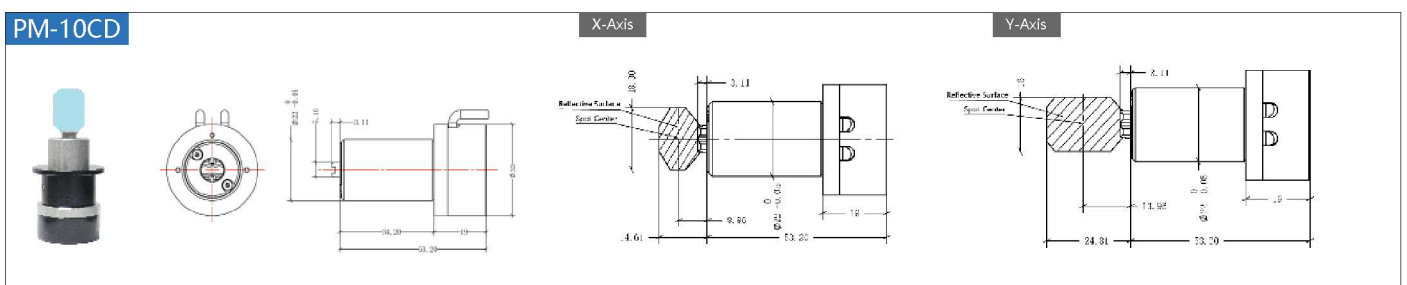
PM-10A



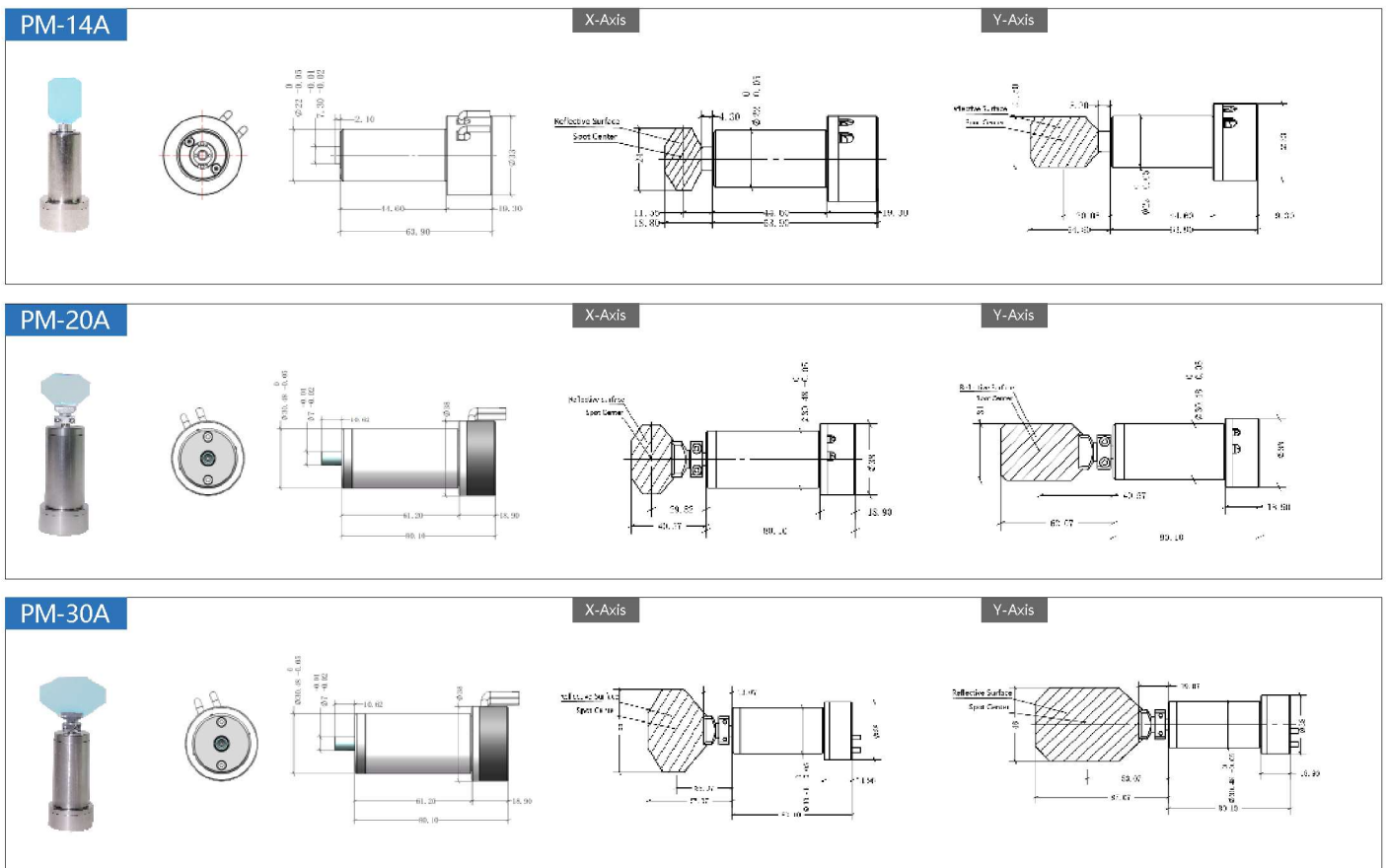
PM-10B



PM-10CD



PM series photogalvanometer



■ Technical parameter

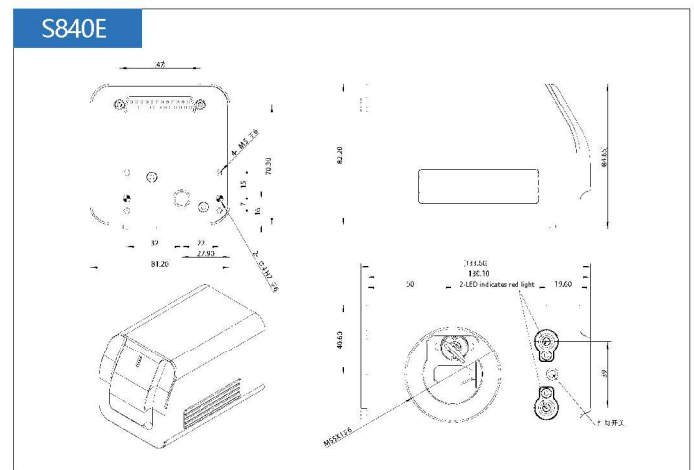
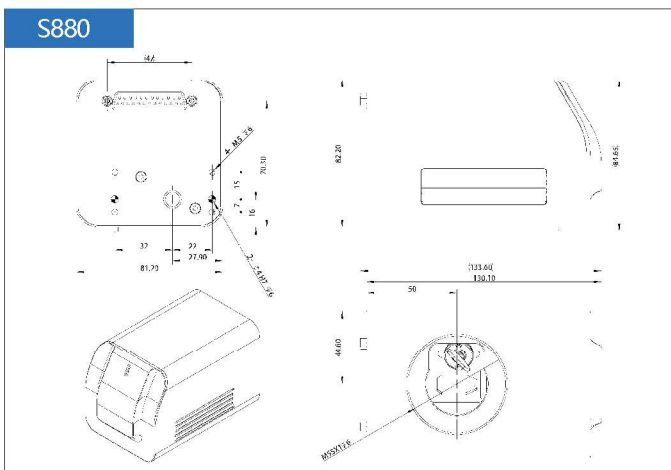
Item	Unit	PM-04A	PM-06A	PM-08A	PM-10A	PM-10B	PM-10C/D	PM-14A	PM-20A	PM-30A
Incident spot	mm	4	6	8	10	10	10	14	20	30
Moment of inertia	g·cm ²	0.18	0.02	0.13	0.36	0.31	0.36	1.4	5.089	5.089
Torque constant	N·mm/A	2	2.1	5	7.4	6.8	7.4	16	23	23
Coil resistance	Ω	1.8±10%	1.5±10%	2.8±10%	2.7±10%	2.9±10%	2.7±10%	2.4±10%	0.85±10%	0.85±10%
Coil inductance	μH	97±10%	102±10%	150±10%	180±10%	168±10%	180±10%	230±10%	355	355
Maximum continuity Electric current	A	1.5	1.5	2	2.5	2.5	2.5	3	3	3
Peak current	A	8	8	10	10	10	10	10	10	10
Maximum coil temperature	°C	110	110	110	110	110	110	110	110	110
Weight	g	260	260	260	260	260	260	320	350	450
Maximum scan angle	deg/mech.	±15 (Mechanical Angle)	±15 (Mechanical Angle)	±18 (Mechanical Angle)	±18 (Mechanical Angle)	±18 (Mechanical Angle)	±18 (Mechanical Angle)	±18 (Mechanical Angle)	±18 (Mechanical Angle)	±18 (Mechanical Angle)
Repeated positioning precision	μrad	8	8	8	8	8	8	8	8	8
Nonlinearity	%	0.1 (Maximum)	0.1 (Maximum)	0.1 (Maximum)	0.1 (Maximum)	0.1 (Maximum)	0.1 (Maximum)	0.1 (Maximum)	0.1 (Maximum)	0.1 (Maximum)
Zero drift	μrad/K	15 (Maximum)	15 (Maximum)	15 (Maximum)	15 (Maximum)	15 (Maximum)	15 (Maximum)	15 (Maximum)	15 (Maximum)	15 (Maximum)
Gain drift	ppm/K	50 (Maximum)	50 (Maximum)	50 (Maximum)	50 (Maximum)	50 (Maximum)	50 (Maximum)	50 (Maximum)	50 (Maximum)	50 (Maximum)
Step response time	ms	0.19	0.2	0.17	0.25	0.25	0.25	0.4	0.5	0.6
Position resolution	Bit	16	16	16	16	16	16	16	16	16
Operating temperature	°C	25 ± 10	25 ± 10	25 ± 10	25 ± 10	25 ± 10	25 ± 10	25 ± 10	25 ± 10	25 ± 10

S-series two-dimensional laser scanning galvanometer

S880/S840E



Overall dimensions (with lenses)



Technical parameter

Dynamic performance	
Light aperture	φ8 mm
Tracking error	< 0.14 ms
Tracking error ¹	6.0 m/s
Positioning speed ¹	20.0 m/s
Write speed ^{1, 2}	600 cps
1% full travel step response time ³	0.3 ms
10% full trip step response time ³	0.7 ms
Accuracy and stability	
Repeated positioning accuracy (RMS)	< 2 μrad
Resolution	16 bit
Nonlinearity	< 0.9 mrad/44°
Zero drift	< 30 μrad/K
Gain drift	< 80 ppm/K
8 hours long drift	< 0.3 mrad
Optical property	
Scanning angle	±0.35 rad
Gain error	5 mrad
Zero error	5 mrad
Universal parameter	
Power source	±15V DC, max 3A
Communication protocol	XY2-100
IP level	IP65
Operating temperature	0°C to +45°C
Storage temperature	-10°C to +60°C
Overall dimension	130.1*82.2*81.2 mm
Weight	About 1.0 kg

Product characteristics

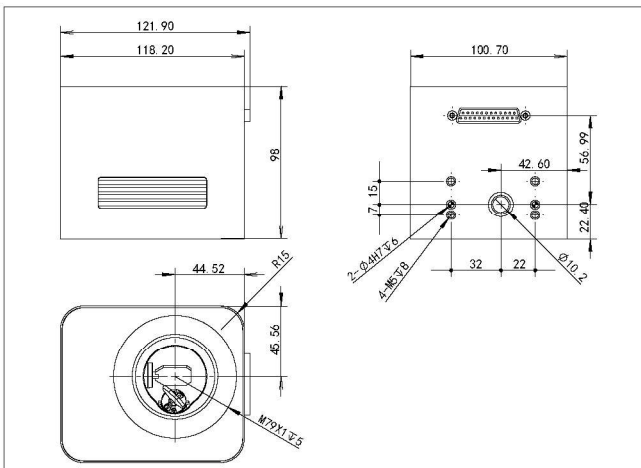
- ◆ Using self-made high-performance scanning motor and industry-leading photoelectric sensing technology.
- ◆ Use difference photoelectric sensor, good linearity, small drift, high resolution and repeated positioning accuracy.
- ◆ Overload, overcurrent and reverse protection design, more reliable operation.
- ◆ Electromagnetic compatibility optimization design, high signal-to-noise ratio, strong anti-interference ability.
- ◆ Use φ8mm lenses covering a variety of wavelength ranges to meet the needs of various industries.
- ◆ Compact size, compact design, light weight; Double red light auxiliary focusing function is added, focusing is fast, convenient and visualization.

M-series two-dimensional laser scanning galvanometer

M101/M102/M103/M105/M107



Overall dimensions (with lenses)



Product characteristics

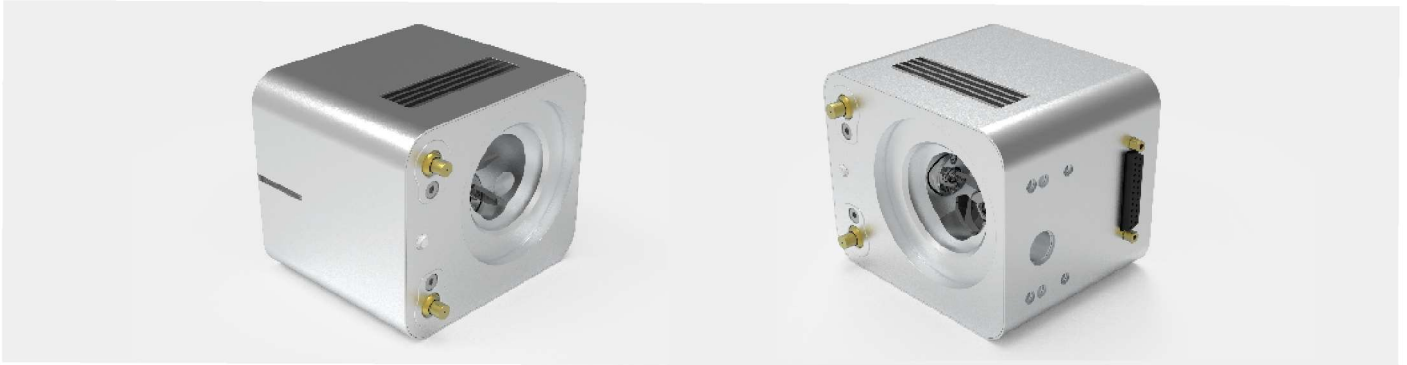
- ◆ Using self-made high-performance scanning motor and industry-leading photoelectric sensing technology.
 - ◆ Use difference photoelectric sensor, good linearity, small drift, high resolution and repeated positioning accuracy.
 - ◆ Overload, overcurrent and reverse protection design, more reliable operation.
 - ◆ Electromagnetic compatibility optimization design, high signal-to-noise ratio, strong anti-interference ability.
 - ◆ Use $\phi 10\text{mm}$ lenses covering a variety of wavelength ranges to meet the needs of various industries.
- Small size, compact design, light weight.

Technical parameter

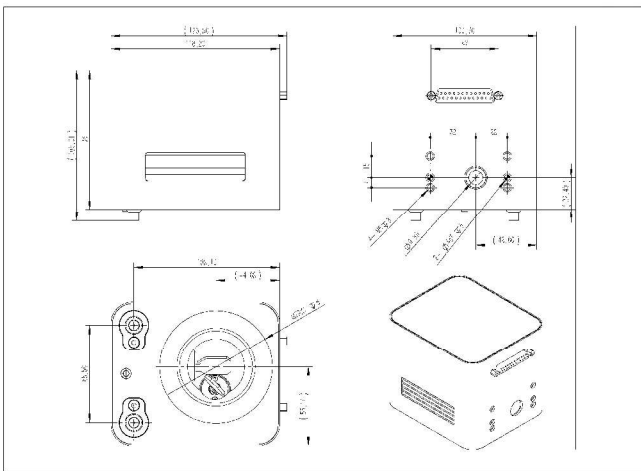
		M101	M102	M103	M105	M107
Dynamic performance	Light aperture	$\phi 10\text{ mm}$	$\phi 10\text{ mm}$	$\phi 10\text{ mm}$	$\phi 10\text{ mm}$	$\phi 10\text{ mm}$
	Tracking error	$< 0.2\text{ ms}$	$< 0.2\text{ ms}$	$< 0.2\text{ ms}$	$< 0.2\text{ ms}$	$< 0.2\text{ ms}$
	Tracking error ¹	2.5 m/s	3.0 m/s	3.0 m/s	4.0 m/s	5.0 m/s
	Positioning speed ¹	10.0 m/s	10.0 m/s	12.0 m/s	15.0 m/s	20.0 m/s
	Write speed ^{1, 2}	300 cps	400 cps	400 cps	400 cps	400 cps
	1% full travel step response time ³	0.3 ms	0.3 ms	0.3 ms	0.3 ms	0.2 ms
	10% full trip step response time ³	0.8 ms	0.8 ms	0.8 ms	0.8 ms	0.6 ms
Accuracy and stability	Repeated positioning accuracy(RMS)	$< 8\text{ }\mu\text{rad}$	$< 8\text{ }\mu\text{rad}$	$< 8\text{ }\mu\text{rad}$	$< 8\text{ }\mu\text{rad}$	$< 8\text{ }\mu\text{rad}$
	Resolution	16 bit	16 bit	16 bit	16 bit	16 bit
	Nonlinearity	$< 0.9\text{ mrad}/44^\circ$	$< 0.9\text{ mrad}/44^\circ$	$< 0.9\text{ mrad}/44^\circ$	$< 0.9\text{ mrad}/44^\circ$	$< 0.9\text{ mrad}/44^\circ$
	Zero drift	$< 30\text{ }\mu\text{rad}/\text{K}$	$< 30\text{ }\mu\text{rad}/\text{K}$	$< 30\text{ }\mu\text{rad}/\text{K}$	$< 30\text{ }\mu\text{rad}/\text{K}$	$< 20\text{ }\mu\text{rad}/\text{K}$
	Gain drift	$< 80\text{ ppm}/\text{K}$	$< 80\text{ ppm}/\text{K}$	$< 80\text{ ppm}/\text{K}$	$< 80\text{ ppm}/\text{K}$	$< 60\text{ ppm}/\text{K}$
	8 hours long drift	$< 0.3\text{ mrad}$	$< 0.3\text{ mrad}$	$< 0.3\text{ mrad}$	$< 0.3\text{ mrad}$	$< 0.2\text{ mrad}$
Optical property	Scanning angle	$\pm 0.35\text{ rad}$	$\pm 0.35\text{ rad}$	$\pm 0.35\text{ rad}$	$\pm 0.35\text{ rad}$	$\pm 0.35\text{ rad}$
	Gain error	5 mrad	5 mrad	5 mrad	5 mrad	5 mrad
	Zero error	5 mrad	5 mrad	5 mrad	5 mrad	5 mrad
Universal parameter	Power source	$\pm 15\text{V DC, max 2A}$	$\pm 15\text{V DC, max 2A}$	$\pm 15\text{V DC, max 2A}$	$\pm 15\text{V DC, max 2A}$	$\pm 15\text{V DC, max 2A}$
	Communication protocol	XY2-100	XY2-100	XY2-100	XY2-100	XY2-100
	IP level	IP65	IP65	IP65	IP65	IP65
	Operating temperature	0°C to +45°C	0°C to +45°C	0°C to +45°C	0°C to +45°C	0°C to +45°C
	Storage temperature	-10°C to +60°C	-10°C to +60°C	-10°C to +60°C	-10°C to +60°C	-10°C to +60°C
	Overall dimension	118.2 X 100.7 X 98mm	118.2 X 100.7 X 98mm	118.2 X 100.7 X 98mm	118.2 X 100.7 X 98mm	118.2 X 100.7 X 98mm
	Weight	$< 1.2\text{ kg}$	$< 1.2\text{ kg}$	$< 1.2\text{ kg}$	$< 1.2\text{ kg}$	$< 1.2\text{ kg}$

M-series two-dimensional laser scanning galvanometer

M101E/M102E/M103E/M105E/M107E



Overall dimensions (with lenses)



Product characteristics

- ◆ Using self-made high-performance scanning motor and industry-leading photoelectric sensing technology.
- ◆ Use difference photoelectric sensor, good linearity, small drift, high resolution and repeated positioning accuracy.
- ◆ Overload, overcurrent and reverse protection design, more reliable operation.
- ◆ Electromagnetic compatibility optimization design, high signal-to-noise ratio, strong anti-interference ability.
- ◆ Use $\phi 10\text{mm}$ lenses covering a variety of wavelength ranges to meet the needs of various industries.
- ◆ Compact design, small size, light weight; Double red light auxiliary focusing function, focusing fast, convenient, visualization.

Technical parameter

		M101E	M102E	M103E	M105E	M107E
Dynamic performance	Light aperture	$\phi 10\text{ mm}$	$\phi 10\text{ mm}$	$\phi 10\text{ mm}$	$\phi 10\text{ mm}$	$\phi 10\text{ mm}$
	Tracking error	$< 0.2\text{ ms}$	$< 0.2\text{ ms}$	$< 0.2\text{ ms}$	$< 0.2\text{ ms}$	$< 0.2\text{ ms}$
	Marking speed ¹	2.5 m/s	3.0 m/s	3.0 m/s	4.0 m/s	5.0 m/s
	Positioning speed ¹	10.0 m/s	10.0 m/s	12.0 m/s	15.0 m/s	20.0 m/s
	Write speed ^{1, 2}	400 cps	400 cps	400 cps	400 cps	400 cps
	1% full stroke step response time ³	0.3 ms	0.3 ms	0.3 ms	0.3 ms	0.2 ms
	10% full trip step response time ³	0.8 ms	0.8 ms	0.8 ms	0.8 ms	0.6 ms
Accuracy and stability	Repeated positioning accuracy (RMS)	$< 8\ \mu\text{rad}$	$< 8\ \mu\text{rad}$	$< 8\ \mu\text{rad}$	$< 8\ \mu\text{rad}$	$< 8\ \mu\text{rad}$
	Resolution	16 bit	16 bit	16 bit	16 bit	16 bit
	Nonlinearity	$< 0.9\text{ mrad}/44^\circ$	$< 0.9\text{ mrad}/44^\circ$	$< 0.9\text{ mrad}/44^\circ$	$< 0.9\text{ mrad}/44^\circ$	$< 0.9\text{ mrad}/44^\circ$
	Zero drift	$< 30\ \mu\text{rad}/\text{K}$	$< 30\ \mu\text{rad}/\text{K}$	$< 30\ \mu\text{rad}/\text{K}$	$< 30\ \mu\text{rad}/\text{K}$	$< 20\ \mu\text{rad}/\text{K}$
	Gain drift	$< 80\text{ ppm}/\text{K}$	$< 80\text{ ppm}/\text{K}$	$< 80\text{ ppm}/\text{K}$	$< 80\text{ ppm}/\text{K}$	$< 60\text{ ppm}/\text{K}$
	8 hours long drift	$< 0.3\text{ mrad}$	$< 0.3\text{ mrad}$	$< 0.3\text{ mrad}$	$< 0.3\text{ mrad}$	$< 0.2\text{ mrad}$
Optical property	Scanning Angle	$\pm 0.35\text{ rad}$	$\pm 0.35\text{ rad}$	$\pm 0.35\text{ rad}$	$\pm 0.35\text{ rad}$	$\pm 0.35\text{ rad}$
	Gain error	5 mrad	5 mrad	5 mrad	5 mrad	5 mrad
	Zero error	5 mrad	5 mrad	5 mrad	5 mrad	5 mrad
Universal parameter	Power source	$\pm 15\text{V DC, max 2A}$	$\pm 15\text{V DC, max 2A}$	$\pm 15\text{V DC, max 2A}$	$\pm 15\text{V DC, max 2A}$	$\pm 15\text{V DC, max 2A}$
	Communication protocol	XY2-100	XY2-100	XY2-100	XY2-100	XY2-100
	IP level	IP65	IP65	IP65	IP65	IP65
	Operating temperature	$0^\circ\text{C to }+45^\circ\text{C}$	$0^\circ\text{C to }+45^\circ\text{C}$	$0^\circ\text{C to }+45^\circ\text{C}$	$0^\circ\text{C to }+45^\circ\text{C}$	$0^\circ\text{C to }+45^\circ\text{C}$
	Storage temperature	$-10^\circ\text{C to }+60^\circ\text{C}$	$-10^\circ\text{C to }+60^\circ\text{C}$	$-10^\circ\text{C to }+60^\circ\text{C}$	$-10^\circ\text{C to }+60^\circ\text{C}$	$-10^\circ\text{C to }+60^\circ\text{C}$
	Overall dimension	118.2 X 100.7 X 98mm	118.2 X 100.7 X 98mm	118.2 X 100.7 X 98mm	118.2 X 100.7 X 98mm	118.2 X 100.7 X 98mm
	Weight	$< 1.2\text{ kg}$	$< 1.2\text{ kg}$	$< 1.2\text{ kg}$	$< 1.2\text{ kg}$	$< 1.2\text{ kg}$

L-series two-dimensional laser scanning galvanometer

L142/L143-R

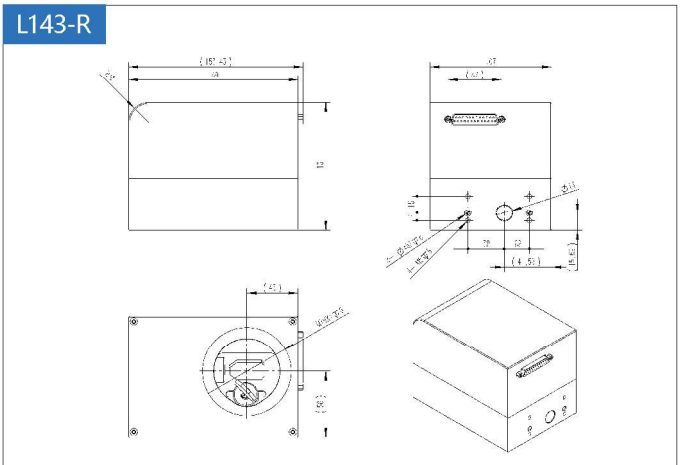
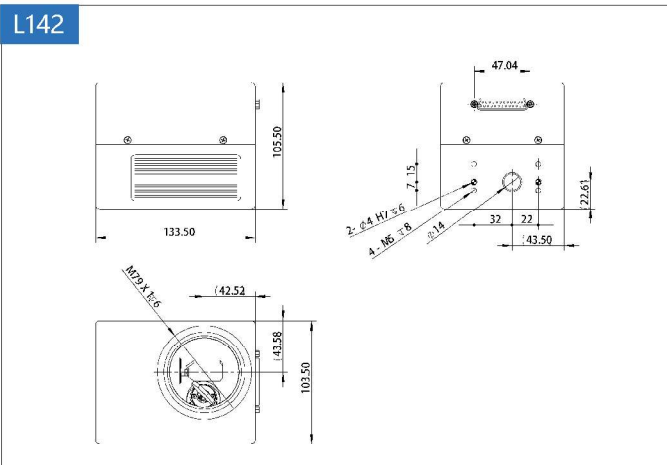


L142



L143-R

Overall dimensions (with lenses)



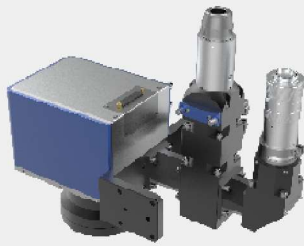
Technical parameter

		L142	L143-R
Dynamic performance	Light aperture	φ14 mm	φ14 mm
	Tracking error	< 0.28 ms	< 0.2 ms
	Marking speed ¹	3.0 m/s	8.0 m/s
	Positioning speed ¹	8.0 m/s	15.0 m/s
	Write speed ^{1, 2}	400 cps	600 cps
	1% full stroke step response time ³	0.65 ms	0.40 ms
	10% full trip step response time ³	1.80 ms	1.60 ms
Accuracy and stability	Repeated positioning accuracy (RMS)	< 5 μrad	< 5 μrad
	Resolution XY2-100 16bit	12 μrad	12 μrad
	Nonlinearity	< 0.9 mrad/44°	< 0.9 mrad/44°
	Maximum position drift ⁴	< 30 μrad/K	< 15 μrad/K
	Maximum gain drift ⁴	< 50 ppm/K	< 25 ppm/K
Optical property	8 hours long drift	< 0.3 μrad	< 100 μrad
	Scanning angle	±0.35 rad	±0.393 rad
	Gain error	5 mrad	5 mrad
Universal parameter	Zero error	5 mrad	5 mrad
	Power source	±15V DC, max 2A	±15V DC, max 2A
	Communication protocol	XY2-100	XY2-100
	IP level	IP65	IP65
	Operating temperature	0°C to +45°C	0°C to +45°C
	Storage temperature	-10°C to +60°C	-10°C to +60°C
	Overall dimension	133.5 X 103.5 X 105.5 mm	149 X 107 X 113 mm
Weight	约 2.1 kg	< 2.4 kg	

Product characteristics

- ◆ Using self-made high-performance scanning motor and industry-leading photoelectric sensing technology.
- ◆ Use difference photoelectric sensor, good linearity, small drift, high resolution and repeated positioning accuracy.
- ◆ Overload, overcurrent and reverse protection design, more reliable operation.
- ◆ Electromagnetic compatibility optimization design, high signal-to-noise ratio, strong anti-interference ability.
- ◆ Use φ14mm lenses covering a variety of wavelength ranges to meet the needs of various industries.
- ◆ Compact design, small size, light weight.

X series laser welding galvanometer module



X20-RF02



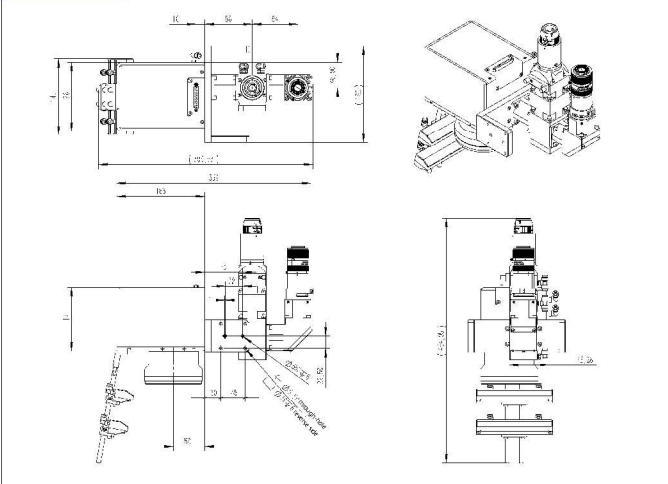
X20-RF03



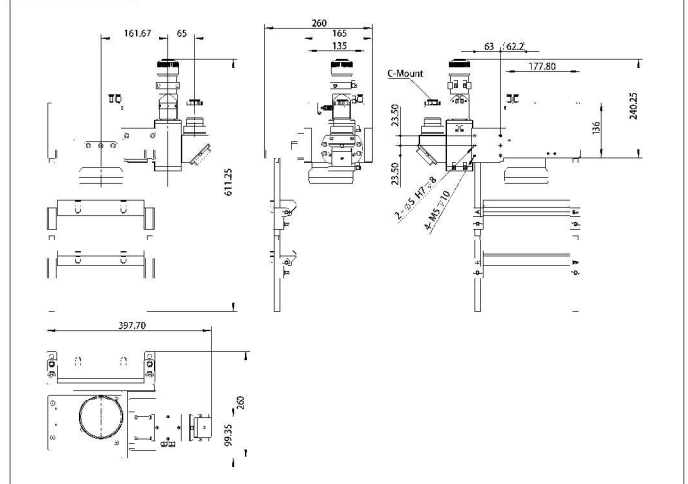
X30-RF04

Overall dimensions (with lenses)

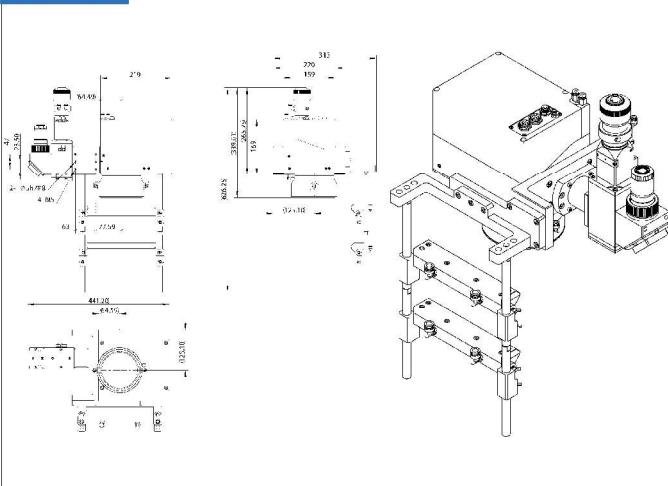
X20-RF02



X20-RF03



X30-RF04



Product characteristics

- ♦ Fast welding speed, high repetitive positioning accuracy, small temperature drift for long working time, rich scanning graphics.
- ♦ The internal cavity is completely sealed, double air knife structure design, efficient dust prevention, effectively avoid optics
A piece of pollution.
- ♦ Overload, overcurrent and reverse protection design, more reliable operation.
- ♦ Electromagnetic compatibility optimization design, high signal-to-noise ratio, strong anti-interference ability.
- ♦ Overall circulating water cooling design, more stable and reliable operation.
- ♦ Modular design, a variety of optical configuration and accessories can be selected to meet the needs of different industries.

X series laser welding galvanometer module

■ Technical parameter

Product model	X20-RF02	X20-RF03	X30-RF04
Maximum load laser power	2000W@1064nm CW	3000W@1064nm CW	4000W@1064nm CW
Light aperture	φ20 mm	φ20 mm	φ30 mm
Collimating focal length (FC)	Available 75mm, 100mm, 125mm	Available 75mm, 100mm, 125mm	Available 100mm, 150mm, 200mm
F-Theta field lens focal length (FL)	Available 160mm, 210mm, 254mm, 330mm	Available 160mm, 210mm, 254mm, 330mm	Available 210mm, 254mm, 330mm, 420mm
Scanning format	110*110mm, 150*150mm, 175*175mm, 220*220mm	110*110mm, 150*150mm, 175*175mm, 220*220mm	140*140mm, 160*160mm, 200*200mm, 255*255mm
Dynamic performance			
Tracking error	< 0.35 ms	< 0.35 ms	< 0.48 ms
Processing speed ¹	6.0 m/s	6.0 m/s	2.5 m/s
Positioning speed ¹	12.0 m/s	12.0 m/s	8.0 m/s
1% full travel step response time ³	0.8 ms	0.8 ms	1.2 ms
10% full trip step response time ³	2.5 ms	2.5 ms	4.5 ms
Accuracy and stability			
Repeated positioning accuracy (RMS)	< 2 μrad	< 2 μrad	< 2.0 μrad
Resolution	16 bit	16 bit	16 bit
Nonlinearity	< 0.9 mrad/44°	< 0.9 mrad/44°	< 0.9 mrad/44°
Maximum gain drift	< 15 ppm/K	< 15 ppm/K	< 50 ppm/K
Maximum position drift	< 10 μrad/K	< 10 μrad/K	< 30 μrad/K
8 hours long drift	< 0.3 mrad	< 0.3 mrad	< 0.15 mrad
Optical property			
Scanning Angle	±0.393 rad	±0.393 rad	±0.393 rad
Gain error	< 5 mrad	< 5 mrad	< 5 mrad
Zero error	< 5 mrad	< 5 mrad	< 5 mrad
Universal parameter			
Power source	±15V DC, max 3A	±15V DC, max 3A	±15V DC, max 3A
Communication protocol	XY2-100	XY2-100	XY2-100
Operating temperature	0°C to +45°C	0°C to +45°C	0°C to +45°C
Storage temperature	-10°C to +60°C	-10°C to +60°C	-10°C to +60°C
Gross weight	About 6.5kg	About 6.5kg	The galvanometer is about 6.5kg and the whole set is about 12kg
Water cooling control			
Cooling water	Purified water	Purified water	Purified water
Water temperature	22°C -28°C	22°C -28°C	22°C -28°C
Maximum water pressure	< 0.3 bar	< 0.3 bar	< 0.3 bar
Flow & Pressure drop	21/min & 0.4 bar, 41/min & 0.8 bar, 61/min & 1.2 bar	21/min & 0.4 bar, 41/min & 0.8 bar, 61/min & 1.2 bar	21/min & 0.4 bar, 41/min & 0.8 bar, 61/min & 1.2 bar

X series laser welding galvanometer module



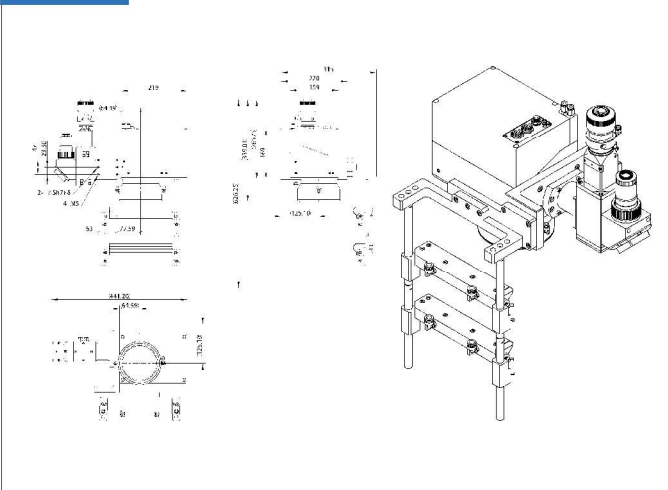
X30-RS06



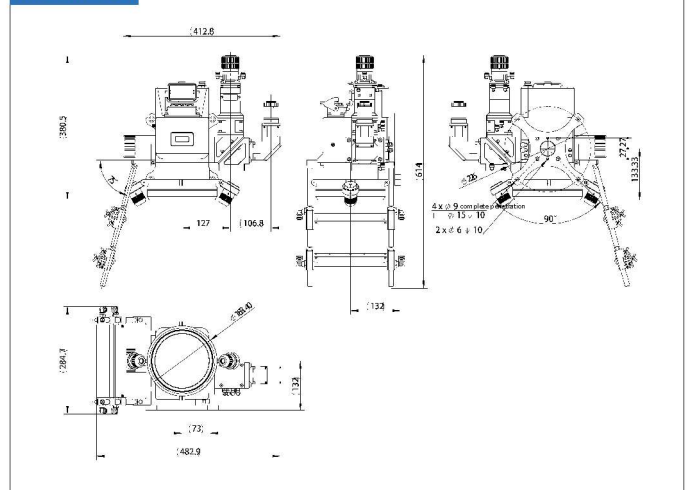
X30-RS08

Overall dimensions (with lenses)

X30-RS06



X30-RS08



Product characteristics

- ◆ Fast welding speed, high repetitive positioning accuracy, small temperature drift for long working time, rich scanning graphics.
- ◆ The internal cavity is completely sealed, double air knife structure design, efficient dust prevention, effectively avoid optical device pollution.
- ◆ Digital drive technology based on FPGA, excellent anti-interference ability and dynamic performance.
- ◆ Imported high precision grating ruler and encoder, low noise, low temperature bleaching, high linearity.
- ◆ Overall circulating water cooling design, more stable and reliable operation.
- ◆ Various accessories: auxiliary red light focusing system, temperature monitoring system, field mirror status detection system, etc.

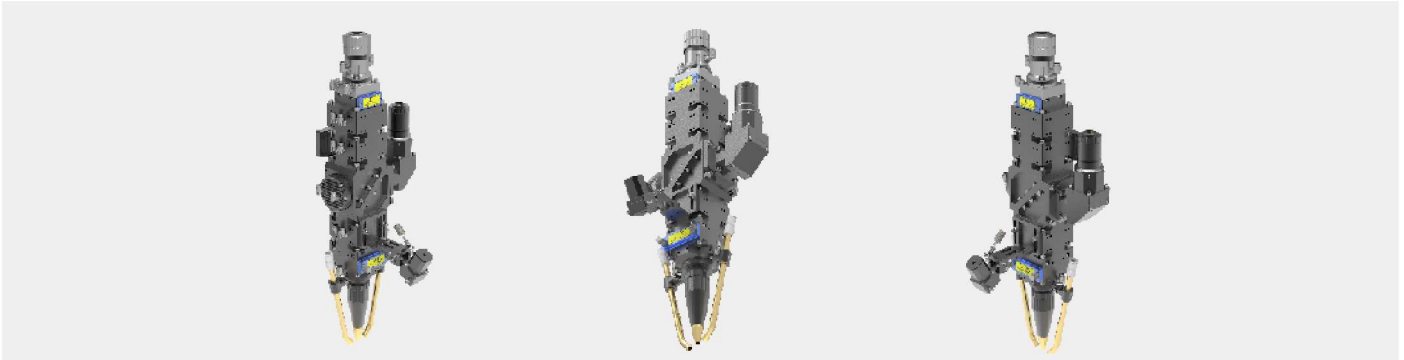
X series laser welding galvanometer module

■ Technical parameter

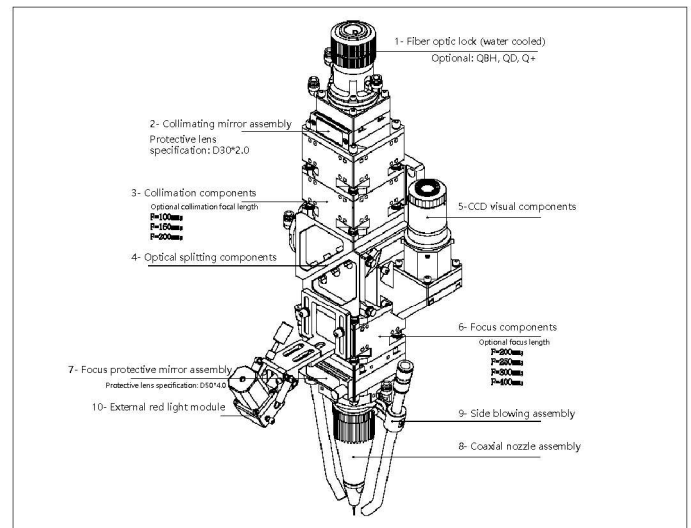
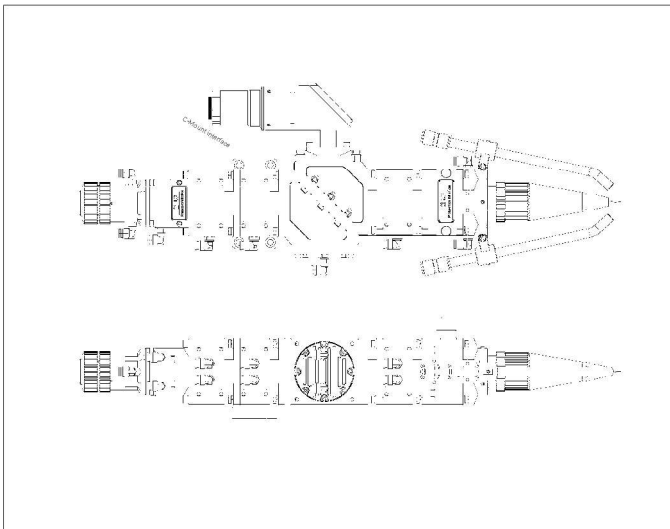
Product model	X30-RS06	X30-RS08
Maximum load laser power	6000W@1064nm CW	8000W@1030-1090nm CW
Light aperture	φ30 mm	φ30 mm
Collimating focal length (FC)	Available 100mm, 150mm, 200mm	Available 100mm, 150mm, 200mm
F-Theta field lens focal length (FL)	Available 210mm, 254mm, 330mm, 420mm	Available 254mm, 330mm, 420mm
Scanning format	140*140mm, 160*160mm, 200*200mm, 255*255mm	160*160mm, 200*200mm, 255*255mm
Dynamic performance		
Tracking error	< 0.25 ms	< 0.5 ms
Processing speed ¹	3.0 m/s	3.0 m/s
Positioning speed ¹	10.0 m/s	8.0 m/s
1% full travel step response time ³	1.1 ms	1.2 ms
10% full trip step response time ³	2.5 ms	3.8 ms
Accuracy and stability		
Repeated positioning accuracy (RMS)	< 2.0 μrad	< 2 μrad
Nonlinearity	< 0.9 mrad/44°	< 0.9 mrad/44°
Maximum gain drift	< 15 ppm/K	< 50 ppm/K
Maximum position drift	< 10 μrad/K	< 30 μrad/K
8 hours long drift	< 80 μrad	< 0.3 mrad
Optical property		
Scanning Angle	±0.393 rad	±0.393 rad
Gain error	< 5 mrad	< 5 mrad
Zero error	< 5 mrad	< 5 mrad
Universal parameter		
Power source	±15V DC, max 3A	±15V DC, max 3A
Communication protocol	XY2-100	XY2-100
Operating temperature	0°C to +45°C	0°C to +45°C
Storage temperature	-10°C to +60°C	-10°C to +60°C
Gross weight	The galvanometer is about 6.5kg and the whole set is about 12kg	About 14kg
Water cooling control		
Cooling water	Purified water	Purified water
Water temperature	22°C -28°C	22°C -28°C
Maximum water pressure	< 0.3 bar	< 0.3 bar
Flow & Pressure drop	21/min & 0.4 bar, 41/min & 0.8 bar, 61/min & 1.2 bar	21/min & 0.4 bar, 41/min & 0.8 bar, 61/min & 1.2 bar

High power collimating welding joint

FFW50



Overall dimensions (with lenses)



Technical parameter

Light aperture	φ48 mm
Maximum laser power	≤ 12kW@1064nm CW
Optical fiber interface	QBH、QD、Q+
Overall dimension	590*210*112 mm
Collimating focal length	100/150/200 mm
Focal length	200/250/300 mm
Collimating protective mirror specifications	D30*2.0
Focus protector specifications	D50*4.0
Industrial lens interface	C-Mount
Gross weight	About 4.5kg

Product features

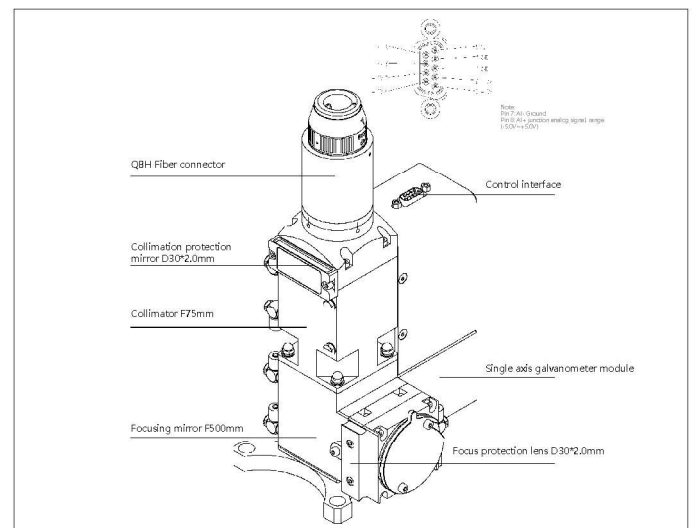
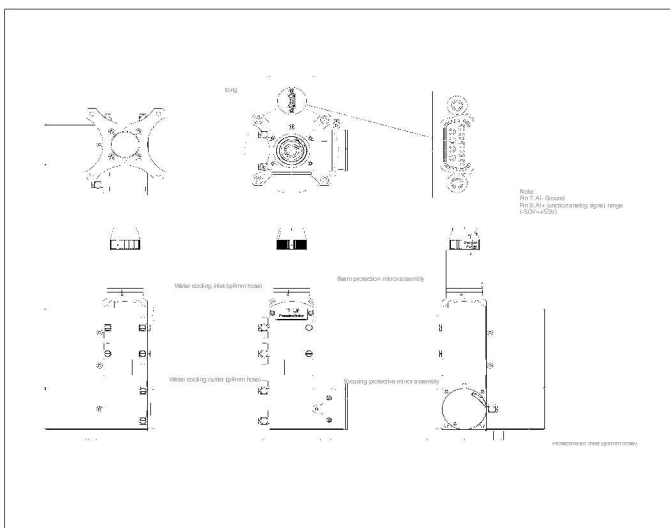
- ◆ High power welding: up to 12kW high power continuous laser welding.
- ◆ Excellent welding effect: low porosity, high mechanical properties, high quality weld surface.
- ◆ Drawer type protective mirror holder: protective lens replacement is fast and convenient, 2 protective lenses, Highly efficient protection of collimating and focusing lenses.
- ◆ Highly dust-proof: reliable sealing design, effectively avoid optical lens pollution, improve service life.
- ◆ Efficient cooling: internal circulation water cooling structure design, small temperature drift, long working time.
- ◆ Modular design: a variety of optical configurations and accessories are optional, suitable for various needs of different industries.

Edge welding head

WS20



Overall dimensions (with lenses)



Technical parameter

Light aperture	φ30 mm
Maximum laser power	≤ 3kW@1064nm CW
Optical fiber interface	QBH
Overall dimension	269*140*111.5 mm
Collimating focal length	75 mm (Customizable)
Working distance	300-500 mm (Suggestion)
Protective mirror specification	D30*2.0
Swing width/frequency	0-60mm / 0-500Hz
Water cooling/protective gas interface	φ6/4 mm hose (Outside diameter/inside diameter)
Gross weight	About 1.8 kg

Product characteristics

- ◆ Designed for laser edge sealing scene, easy adjustment of process parameters.
- ◆ Support external communication control to achieve industrial integration.
- ◆ Small size, simple installation, easy to transform and assemble.
- ◆ Reliable sealing design, effectively avoid optical lens pollution, high dust, high service life.
- ◆ Circulating water cooling structure design, small temperature drift, long working time.

Originality Ouya innovation from the beginning



Professional customized service solutions

Design and optimize according to customer needs and specifications, professional production and manufacturing, and provide customers with exclusive customized solutions.



Lean quality production

Based on customer satisfaction, through standardized production and strict inspection of products, quality monitoring and control are implemented to provide customers with an efficient and safe quality assurance system.



Precision process management

Based on the product structure, implement scientific big data analysis and statistical methods, as well as precision research and development of production processes, to ensure the stability and safety of the product.