

# LUXINAR

INGENUITY AMPLIFIED



## INDUSTRIAL SR AOM series

Sealed CO<sub>2</sub> laser sources

## Who we are

At Luxinar, we have a singular focus: developing laser technology to enhance our world.

Like a laser that channels light into a single, powerful beam, we focus on improving the lives of our customers. This allows us to create solutions to meet every single challenge. Luxinar has been at the forefront of laser technology for over 25 years and we have an installed base of more than 25000 lasers worldwide in industrial application environments. We are now using our expertise to offer cutting edge ultrashort pulse laser sources.

Luxinar – INGENUITY AMPLIFIED

## CO<sub>2</sub> industrial lasers

Our industrially proven sealed laser sources are based on a diffusion-cooled slab principle that gives a high-quality, round, and symmetrical beam. Running costs are minimal, gas recirculation equipment such as vacuum pumps or pressure control systems are not needed, and there is no gas refill requirement during the operational lifetime of the laser.

Our versatile portfolio caters for many different configurations, allowing us to provide laser solutions tailored to customers' specific applications. System performance can also be configured to suit applications according to a list of options available.

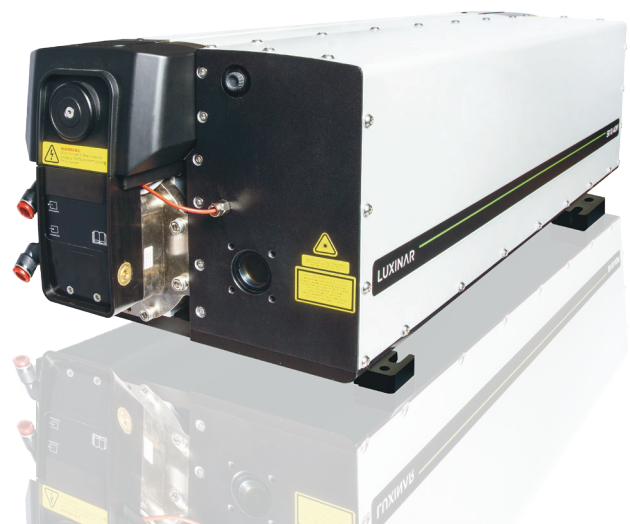


## SR AOM series - power range of 0-150W

- Optical pulse rise/fall time < 1 $\mu$ s for high-precision processing, energy control and reduced heat-affected zone (HAZ)
- Integrated, detachable and field replaceable RF power supply for ease of installation and servicing
- Power loop control as standard for enhanced stability

The SR 10 AOM and SR 25 AOM sealed CO<sub>2</sub> laser sources add value to the established SR series from Luxinar by using an integrated acousto-optic modulator to create much faster rise and fall times. The AOM range provides superior pulse-to-pulse control, output power stability and an integrated and field replaceable RF power supply design. The simple control interface and compact mechanical design of the unit allow easy

integration into laser-based processing machines used for cutting, scribing, engraving, marking and surface patterning, giving distortion-free materials processing and an improved cutting edge. In common with the rest of the SR series, the AOM range offers simple integration, clean and high-quality laser processing, and low running and maintenance costs.

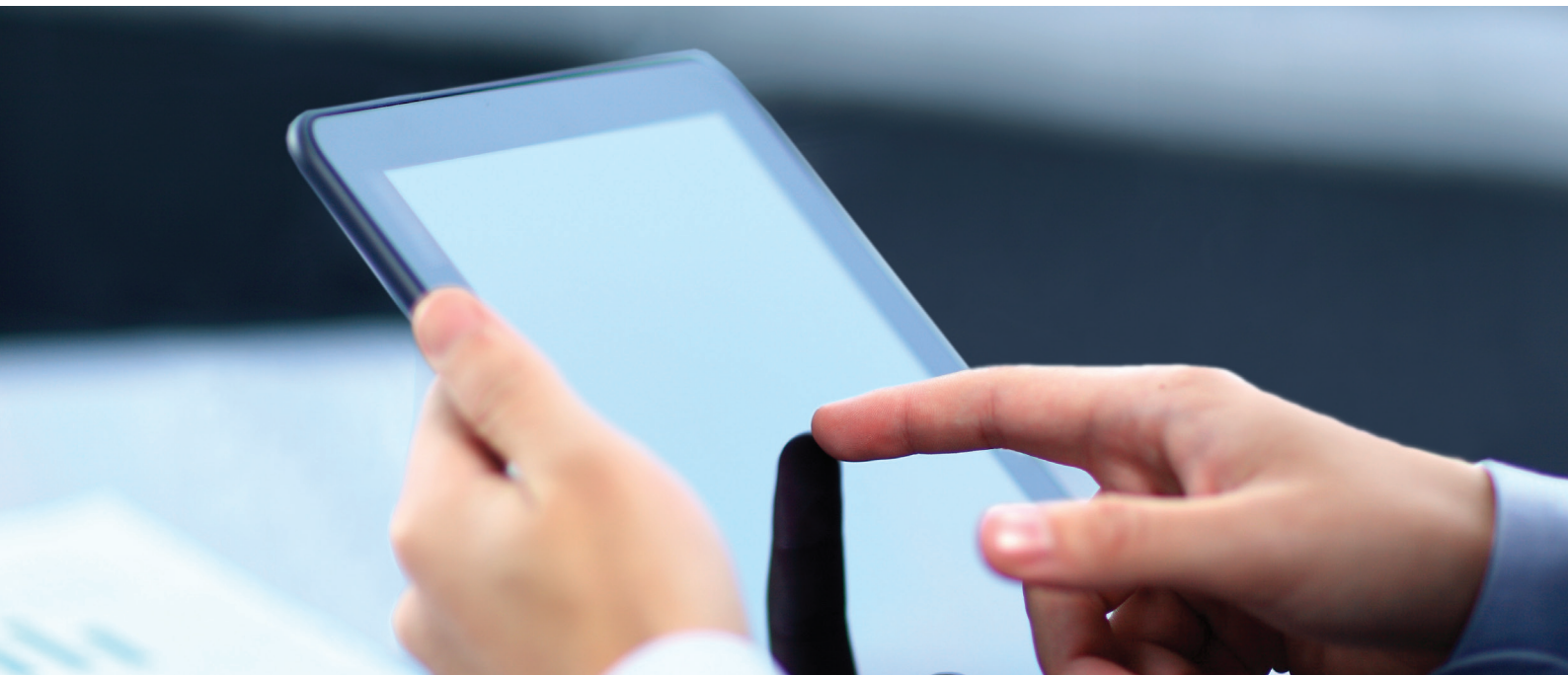


## Applications

- Backlight unit (BLU) patterning
- Flat panel display film cutting
- High speed resolution printing
- Multilayer thin film scribing/cutting
- PCB marking and drilling
- Polarizing film cutting
- Polymer-dispersed liquid crystal display (PDLCD) film cutting
- Print roller engraving

## Industries

- Automotive
- Display screen
- Electronics
- Labelling
- Lighting
- Modified Atmosphere Packaging (MAP)
- Packaging (including flexible packaging)
- Security



## Specifications of SR AOM series

	SR 10 AOM 9.3	SR 25 AOM 9.3
Power range	0-75W	0-150W
Peak laser output power	75W	150W
Duty cycle (max)	100%	100%
Wavelength	9.3µm	9.3µm
Typical stability (long term)	< ± 2%, < ± 3% guaranteed	
Beam diameter	5.6 ± 0.5mm – (1/e <sup>2</sup> ) at laser output optic	7.7 ± 0.5mm – (1/e <sup>2</sup> ) at laser output optic
Polarisation	Linear (perpendicular to base)	
Weight	47.1kg	50kg
Voltage	50VDC ± 1%	
Maximum average input current	54A	106A
Optical rise/fall time	< 1µs	
Pulse width	> 1µs	
AOM pulse frequency	0-240kHz	
Safety shutter	✓	
Laser diode pointer	✓	

Contact your local representative for details of 10.6µm wavelength.



Our global aftersales team

## Pre-sales technical support

Could a laser improve your manufacturing process?

Find out by sending us samples of your material or product to test in our labs.

Luxinar's engineers can carry out cutting, marking, engraving, drilling, scribing, ablation, and more to replicate your application in the lab. You'll receive your processed sample within 10 working days and a detailed report of our findings even sooner. You can also receive complimentary advice ranging from fume extraction to sample positioning.

Whatever your process, we can help you to determine the best laser for your application.

## Technical support

The Luxinar aftersales team is comprised of technical specialists, passionate and knowledgeable about laser sources. Each team member has an in-depth understanding of laser technology, our products, as well as a wealth of experience of lasers working in a multitude of industries and environments.

Our dedicated, highly skilled and experienced aftersales technicians located in Europe, China, Korea and the USA are on hand to provide the following support:

- Troubleshooting
- Spare parts identification
- Product documentation
- Integration support
- System maintenance

Our technical teams are based at Luxinar sites in China, Germany, Italy, Korea, the UK and the USA to give you laser support whenever you need it. Contact us at [info@luxinar.com](mailto:info@luxinar.com)

Please note that while every effort has been made to ensure that the data given in this document is accurate, due to a policy of continued improvement, the information, figures, illustrations, tables, specification and schematics contained herein are subject to change without notice.

© 2024 Luxinar Ltd

Luxinar Ltd  
Meadow Road  
Bridgehead Business Park  
Kingston upon Hull  
HU13 0DG UK

Tel: +44 1482 650088  
[sales.uk@luxinar.com](mailto:sales.uk@luxinar.com)  
[www.luxinar.com](http://www.luxinar.com)

Registered in England: 3477444



**Class 4 Invisible laser radiation.**  
Avoid eye or skin exposure to direct or scattered radiation