

**SR 10i**

**VERSATILE - RELIABLE - POWERFUL**

SEALED CO<sub>2</sub> LASER

Rofin-Sinar UK is one of the world's leading designers and manufacturers of industrial lasers. The company has more than 15,000 lasers installed in a wide variety of laser processing applications and industries worldwide.

The SR 10i incorporates proven RF excited slab laser design with the latest leading edge technologies to give:

- A high quality, round symmetrical beam for high processing speeds
- A short optical pulse with high peak power for improved edge quality and minimal heat affected zone (HAZ)
- An IP66 rated system capable of operating in the harshest of industrial environments
- A compact design with integrated and field replaceable RF module for simple integration and servicing
- A minimum shipment power 20% higher than rated power to ensure extended sealed lifetime
- A typical power stability of 1% using optional power feedback control and well defined wavelength to ensure a high level of process repeatability
- Safety performance level D (EN13849) as specified in the latest European Standards

The SR 10i is supported by our global network of service centres and technicians worldwide.



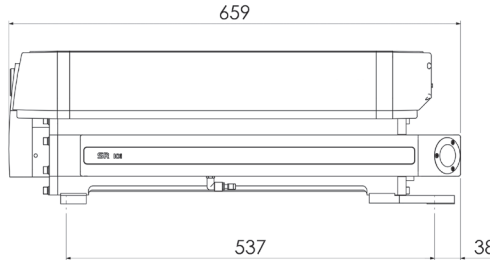
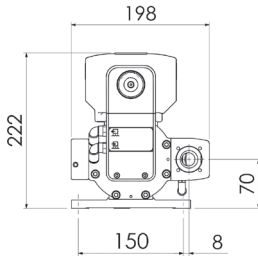
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## Applications..

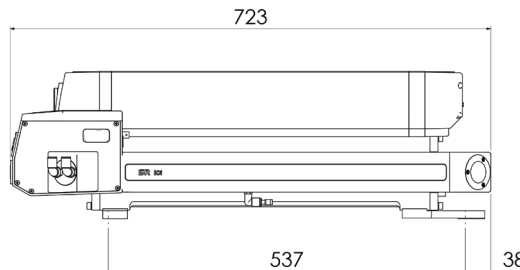
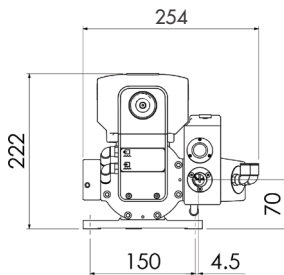
- Cutting
- Drilling
- Marking
- Engraving
- Scribing
- Perforating
- Welding
- Kiss Cutting



Standard System

## Materials..

- Rubber
- Plastic/Polymer
- Acrylic
- Glass
- Textiles
- Wood
- Ceramics
- Thin Sheet Metal
- FR4



Power Feedback with Shutter System

[WWW.ROFIN-SINAR.UK](http://WWW.ROFIN-SINAR.UK)

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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 continuous improvement, the information, figures, illustrations, tables, specification and schematics contained herein are subject to change without notice.

Specification	10.6	10.25	9.3
Power range	10 to 125W	10 to 110W	5 to 95W
Minimum shipment power	150W	135W	115W
Peak laser output power	>315W	>285W	>245W
Wavelength	10.6µm	10.25µm	9.3µm
Typical stability (long term)	< ± 4.5%, < ± 7% guaranteed < ± 1%, < ± 2% guaranteed (Power Feedback)*		< ± 8% guaranteed
Beam diameter	6.0mm ± 0.5mm - (1/e <sup>2</sup> ) at laser output optic		
Polarisation	Linear parallel to base, purity > 100:1		
Weight	22 kg	23.9 kg with Shutter/Power Feedback module	
Voltage	50 VDC +/- 1%		
Peak RF input current	80A		
Maximum average input current	48A		
Optical rise/fall time	<60µs		
Pulse width	2-400µs		
Pulse frequency	0-130kHz		

\* Power feedback turn on response is typically 300 - 500 milliseconds.

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