

# IRYS 10W

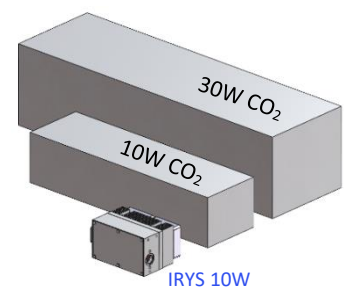
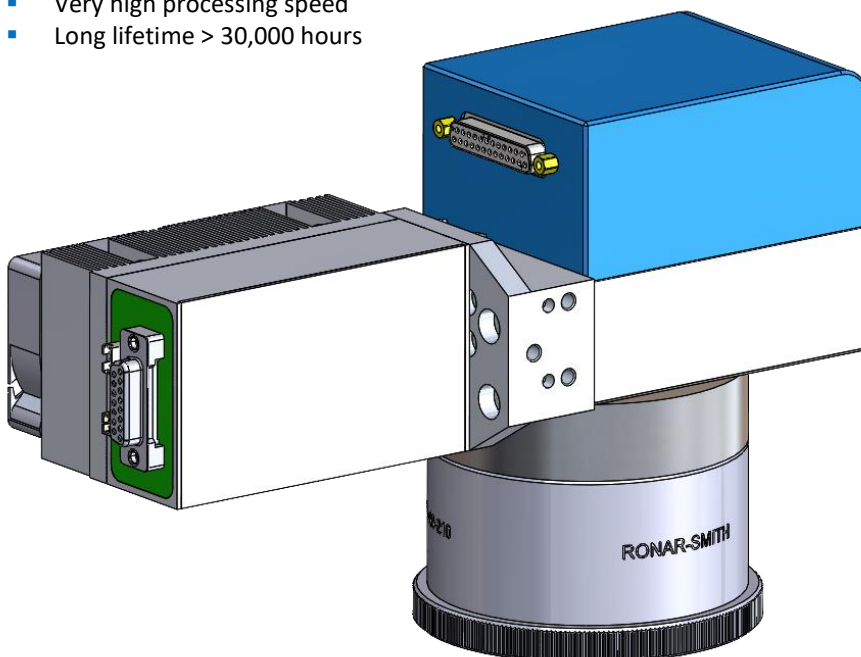
## BLUE 450nm LASER GALVO MARKING SYSTEM



IRYS 10W @450nm is an extremely compact laser marking unit suitable for a variety of applications, from direct marking on organic materials (tissue, leather, food) to very high-speed traceability marking in the packaging, pharma, electronics markets up to variable-geometries soldering of PCB components and wire soldering on power electronics components. Thanks to the strong absorption of the blue 450nm radiation by the materials used in the PCB manufacturing and soldering, IRYS 10W represent a smart solution for precision traceability marking and dynamic soldering on PCB boards, with the beam being targeted and shaped by the scanning head.

Being the blue 450nm radiation strongly absorbed by many materials often processed with CO<sub>2</sub> lasers, our IRYS 10W system can be a valid substitute to 10.6µm radiation where small volume occupancy and low consumption are key points. With its very high processing speed, IRYS 10W can be compared to a state-of-the-art 20/30W CO<sub>2</sub> marking system, but with about one-tenth of volume occupancy, thus making integration incredibly simple and efficient.

- DYNAMIC SOLDERING OF PCB COMPONENTS WITH ARBITRARY SHAPE
  - PRECISION TRACEABILITY MARKING ON PCB BOARDS
  - CARDBOARD / PAPER / WOOD / LEATHER MARKING, DECORATING & CUTTING
  - DIRECT MARKING ON ORGANIC MATERIALS (ECO-MARKING)
  - THIN COATING ABLATION / MARKING
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- Valid substitute to CO<sub>2</sub> lasers: down to 1/3 power required for same processing
  - Sharp trace, symmetrized spot shape
  - Extremely compact & low cost
  - Ease of integration
  - Very high processing speed
  - Long lifetime > 30,000 hours



## TECHNICAL SPECIFICATIONS

Technology	-	Direct Diode
Wavelength (nominal)	nm	450nm
Wavelength range	nm	440 / 460
Output power	W	10
Operating current	A	< 6
Operating voltage	V	24
Operating temperature (*)	°C	+10 / +30
Storage temperature (*)	°C	-20 / +60
Cooling	-	Air
Marker Version (OEMKR) includes:		
▪ Scanning head – 10mm aperture	-	
▪ F-theta lens – EFL 210mm (**): working area	mm	120 x 120
▪ OEMKR driver + temperature controller	-	
▪ Marking software (basic license)	-	
Also available in OEM version		

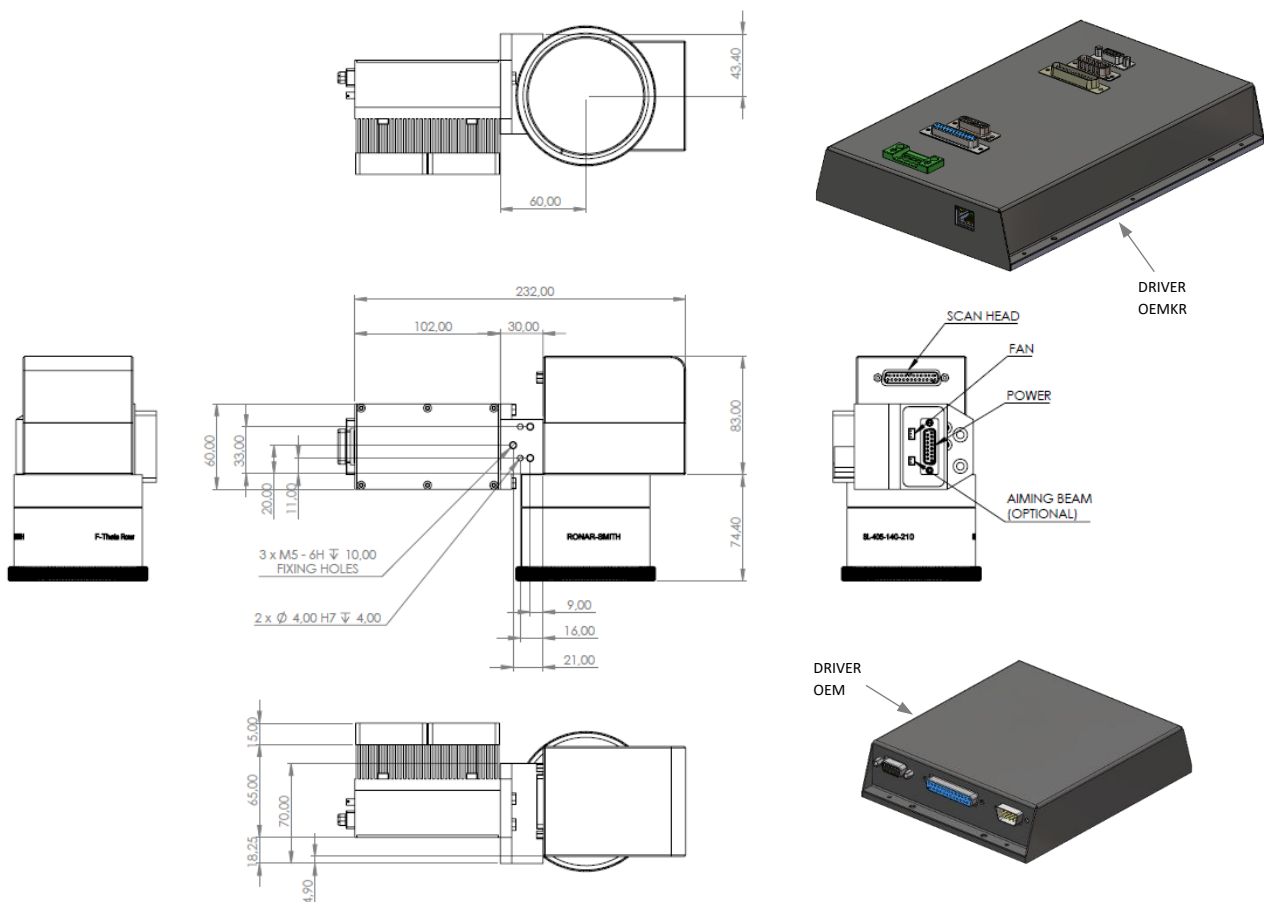
Conditions unless otherwise stated: typical parameters at 25°C \* Not-condensing environment \*\* Others available upon request

## APPLICATION TIPS

Find our application tips and insights at the following links:

- <https://www.lyocon.com/applications/blue-marking/>
- <https://onlinelibrary.wiley.com/doi/epdf/10.1002/phvs.202100036>

## MECHANICAL INTERFACE



Lyocon aims to continuous improvement of its products, so specifications may change without notice. Class 4 Laser Product.