

# BLADE™ RF



RF 1222 // THE BIG BOY  
**Never ending power lasers**



**High Power CO<sub>2</sub> lasers: 1200W**

## KEY FEATURES

- Self refilling Technology
- Radio Frequency excited
- Low operative cost & Easy integration
- High reliability & High beam quality
- High electrical/optical conversion efficiency
- Integrated RF power supply
- TCP/IP connection for remote diagnostics and control
- Integrated shutter for safety certificability
- On board HMI panel



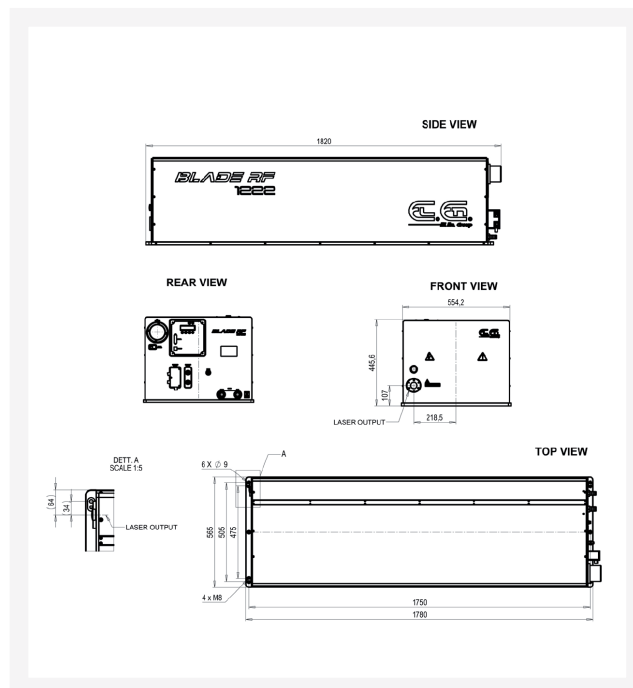
# RF 1222 // THE BIG BOY

## Never ending power lasers

The **Blade RF 1222** CO<sub>2</sub> laser, joins the advantages of the RF excitement technology (high peak power, high frequency modulation, compactness) with the incredible advantages of virtually "no factory service" requirement of the self refilling solution.

### MAIN APPLICATIONS:

- high performance remote processing;
- plastic, wood, leather, textile and steel cutting;
- digital converting;
- paper, cardboard and labels hi-speed cutting and kiss-cutting



### Systems Specifications

Model	RF 1222
Rated power (W)	1200
Effective peak power (W)	2400
Power stability (long term)	±5%
Wavelength (µm)	10.6 ± 0.4
Polarization	linear vertical
Beam diameter (1/e <sup>2</sup> at the exit) (mm)	11 ± 0.5
Beam divergence (1/e <sup>2</sup> full angle) (mrad)	2.0 ± 0.2
Maximum pulsing frequency (kHz)	100
Pulse width range (µs)	2 ÷ 150
Mode quality (M <sup>2</sup> )	<1.2
Beam ellipticity	1.2 : 1
Typical gas mix consumption (NI / year)	170
Pulse rise / Fall Time (µs)	<50
Environmental temperature range (°C)	5° ÷ 35°
Maximum humidity	Non condensing at inlet water cooling temperature

### Electrical Power Requirements

Input voltage (V <sub>DC</sub> )	48 ± 0.5
Max current (A)	400

### Coolant

Heat dissipation (W)	20000
Coolant temperature (°C)	20° ± 1°
Max water cooling input pressure (bar)	6
Water cooling flow rate (l/min)	40

### Dimension/Weight

Dimension (LxWxH) (mm)	1820x565x446
RF Power supply dimensions	integrated
Safety shutter	optional
Weight (kg)	300

NOTE: Aiming to product improvement, El.En. SpA reserves the right to change specifications without notice. Purchaser acknowledges that the products must comply with applicable regulations before they can be resold to customers. El.En. lasers are produced under a quality assurance system certified according to ISO 9001.



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