

"ALL IN ONE" NEW GENERATION SOLID STATE LASER MARKING UNIT



- **OEM** line is the range of products for **O**riginal **E**quipment **M**anufacturer developed by SEI Laser to supply its partners with its best and most efficient laser technology. Thanks to the OEM Line it is possible to integrate SEI's high value added knowledge in Laser technology into any production line or customized machine.
- SEI Laser provides full support for HW+SW customization as well as R&D on any specific application.
- **Laser³** is one of the modules developed by SEI laser dedicated to many different markets and applications as: IDcard, pharmaceutical, electronic, food&Beverage, coding and traceability on production lines.



Electric components



Mechanical components



Branding



ID card



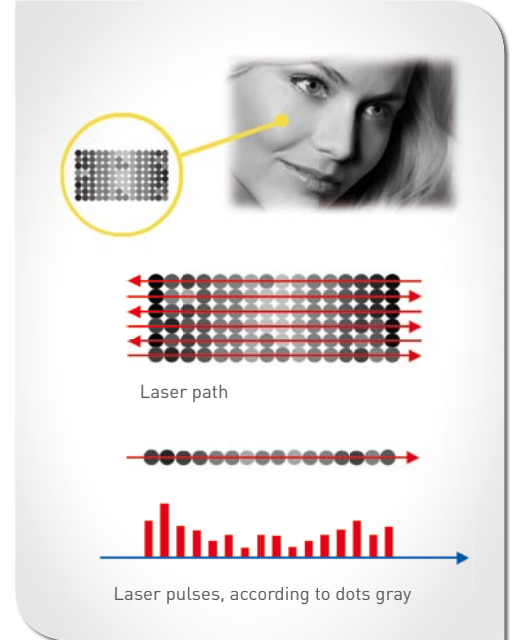
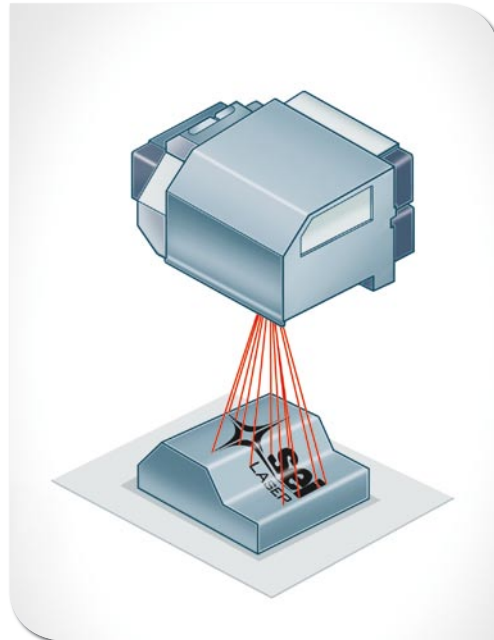
Mechanical components

The bar coding and laser marking markets have been thriving recently. This upward trend is largely due to the growing demand within numerous industries for product traceability and flexible programmable processes.

SEI S.p.A. is in a position to meet this growing

demand by launching 'LASER³' (laser cube) the latest laser marking system utilizing long life DPSS technology operating within the infrared spectrum (1064nm).

The main feature of this latest laser solution, besides a peculiar optic frame of laser beam, is the fact

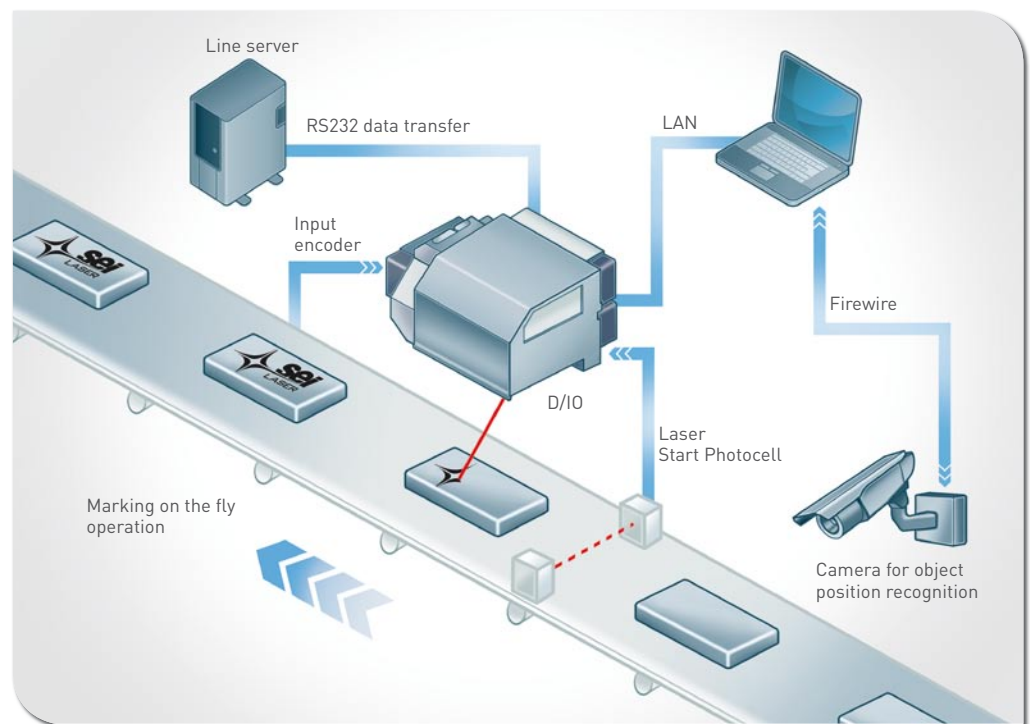


■ **DYNAMIC FOCUS SHIFTING**

To mark on different layers

■ **HI END GRAY-TONES CAPABILITY (LASER ENERGY MODE)**

To perform remarkable photorealistic bitmaps at high marking speeds



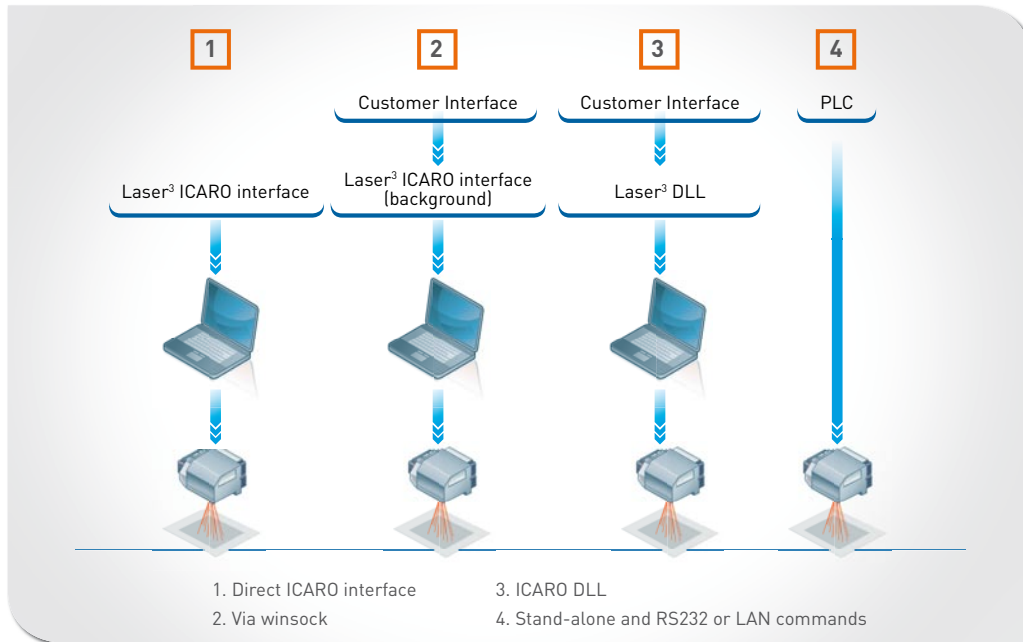
■ **MARKING ON FLY CAPABILITY**

Enhance any production line with maximum productivity

that the laser cavity, scan head and full digital electronic control are incorporated in a unique small enclosure measuring 359 x 251 x 198 mm.

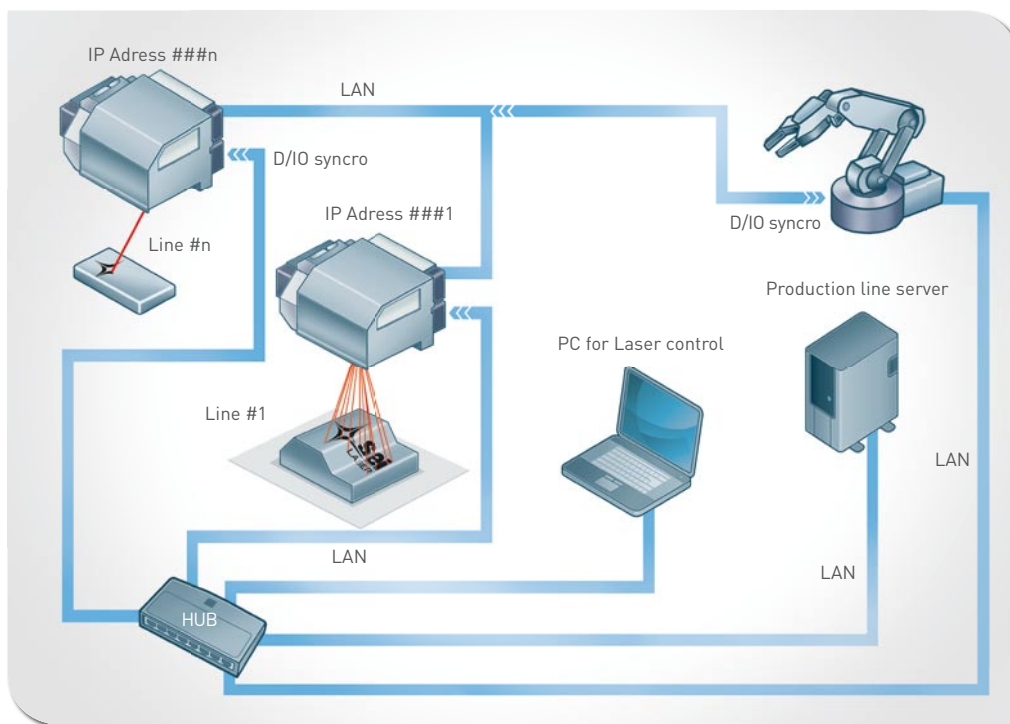
The SEI LASER³ can be driven by any Personal Computer and the proprietary SEI software ICARO (Windows®)

ICARO currently monitors the status of the laser equipment (laser on, emergency-alarms, main parts working status, hour counter... and many other parameters i.e.: synchronization and connections with production lines, automation, robots besides the normal machine options.



■ FLEXIBLE MULTIPLE SOFTWARE INTERFACES

From full ICARO interface software to stand alone management control

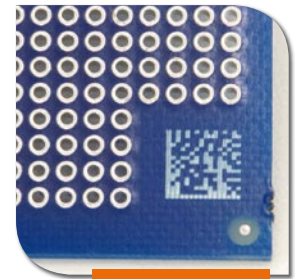


■ PLUG & PLAY HARDWARE CAPABILITY

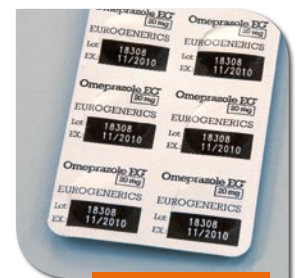
Easy and fast placement into existing or new automatic lines



Night & Day



Electronic board



Pharmaceutical



Anti-counterfeiting



Electric components



Micro - coding



Labeling



Telecommunication

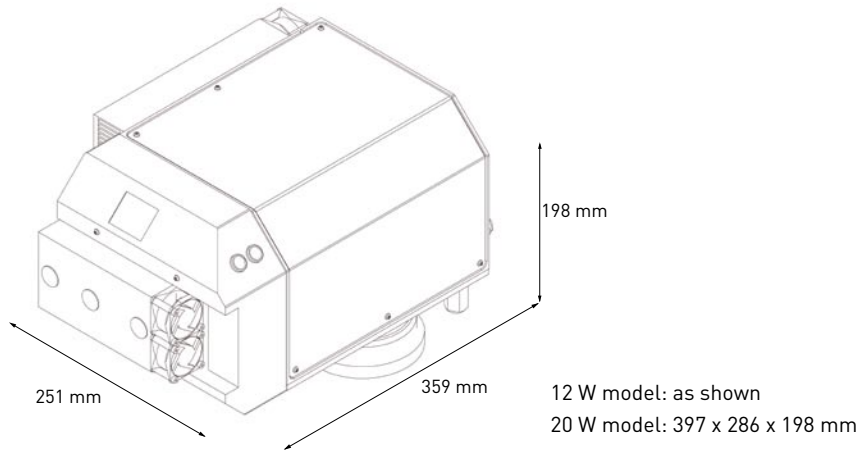


Deep engraving



Jewellery

Model	Laser3 12 W	Laser3 20 W
Wavelength [nm]	1064	
Tecnology	multiple diode solid state laser	
Max. power (typical) [W]	> 12	> 20
Pulse repetition frequency [kHz]	0 - 100	
Peak power (max.) (kW)	≈ 130	≈ 200
Beam quality factor M ² (max.)	< 1.5	< 1.5
Spot diameter [µm]	f 100 = 25	
	f 163 = 50	
	f 254 = 90	
	f 330 = 100	
Working area [mm]	f 100 = 60 x 60	
	f 163 = 110 x 110	
	f 254 = 180 x 180	
	f 330 = 220 x 220	
Focus distance [mm]	f 100 = 120	
	f 163 = 210	
	f 254 = 380	
	f 330 = 440	
Dynamic focus range [mm]	f 100 = 20	
	f 163 = 50	
	f 254 = 120	
	f 330 = 180	
Cooling	Air-actively stabilized by TEC	



Features

- Compact size
- High reliability
- Long average life time
- Very low running costs
- The state of the art technology and performances
- Built-in full digital control electronics
- Air-cooled system
- Designed for OEM, customized solutions and to be integrated into automatic production lines
- Built-in remote diagnostics (internet service)

Laser³ is a **Classe 4** product CEI EN 60825/1 norm compliant