

"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 Laser'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



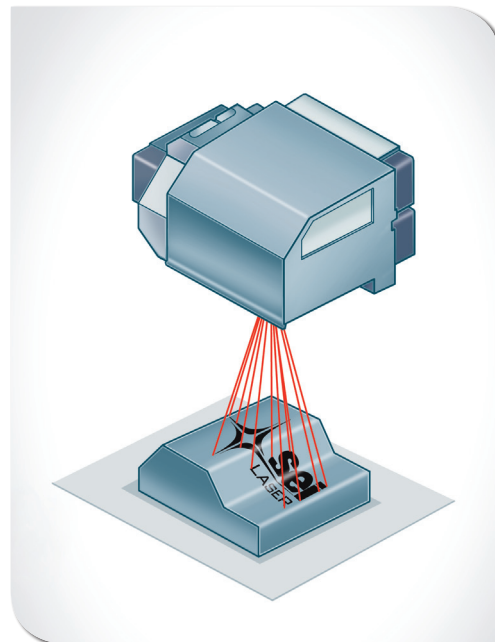
Mechanical components

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 Laser is in a position to meet this growing

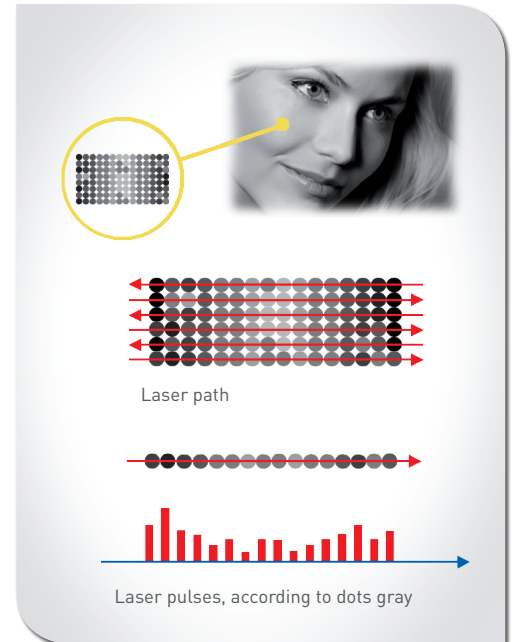
demand by launching "LASER3" the latest laser marking system utilizing long life DPSS technology operating within the infrared spectrum (1064 nm).

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



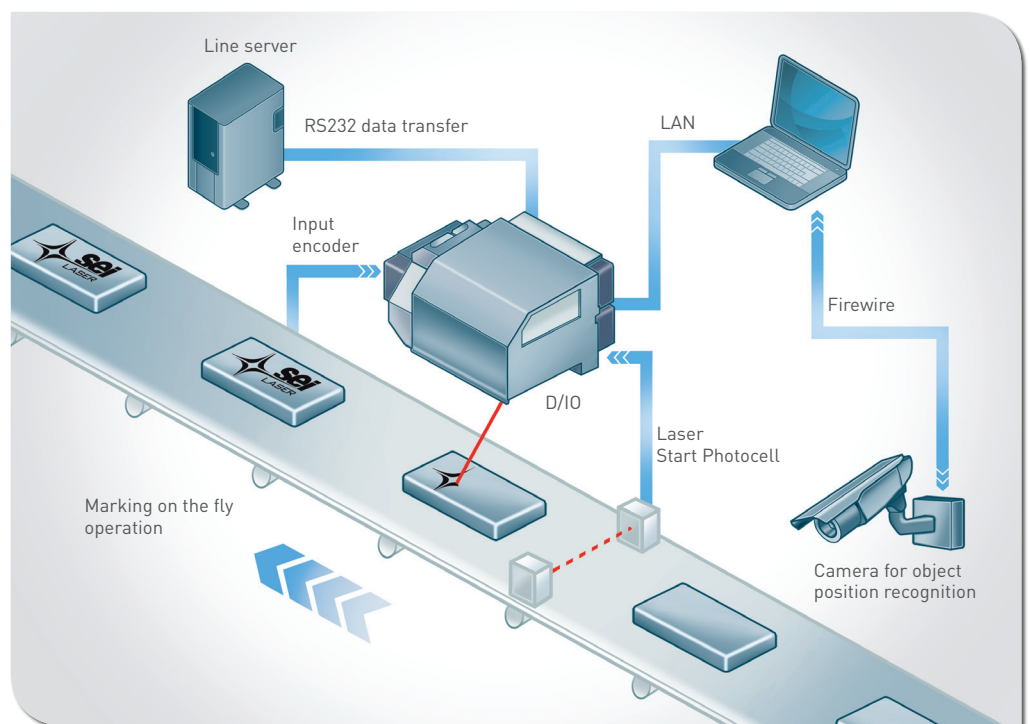
■ DYNAMIC FOCUS SHIFTING

To mark on different layers.



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

To perform remarkable photorealistic bitmaps at high marking speeds.



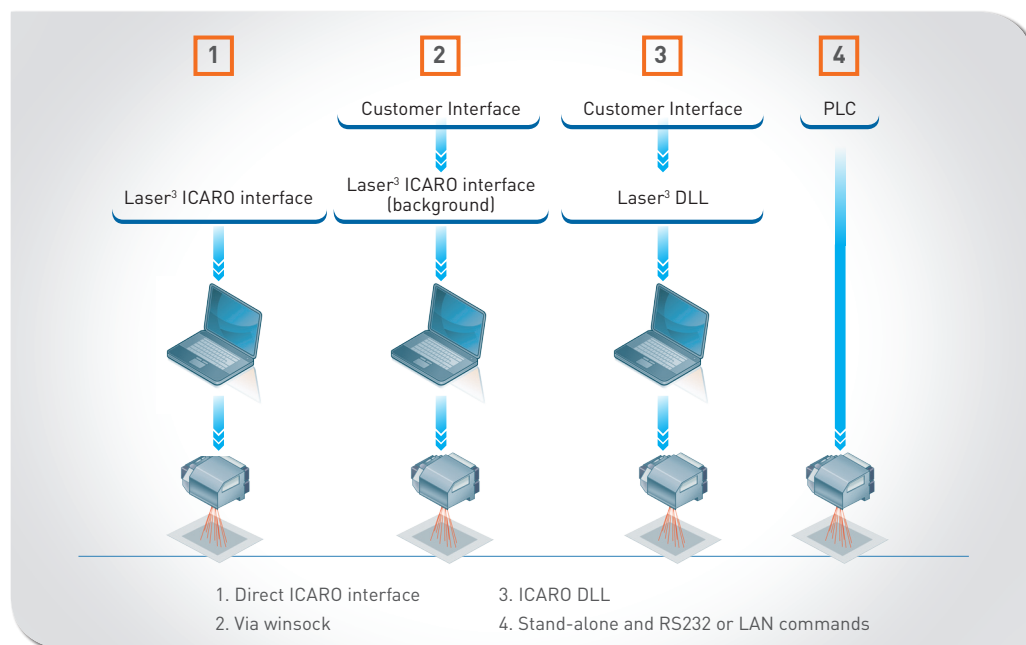
■ MARKING ON FLY CAPABILITY

Enhance any production line with maximum productivity.

fact 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.

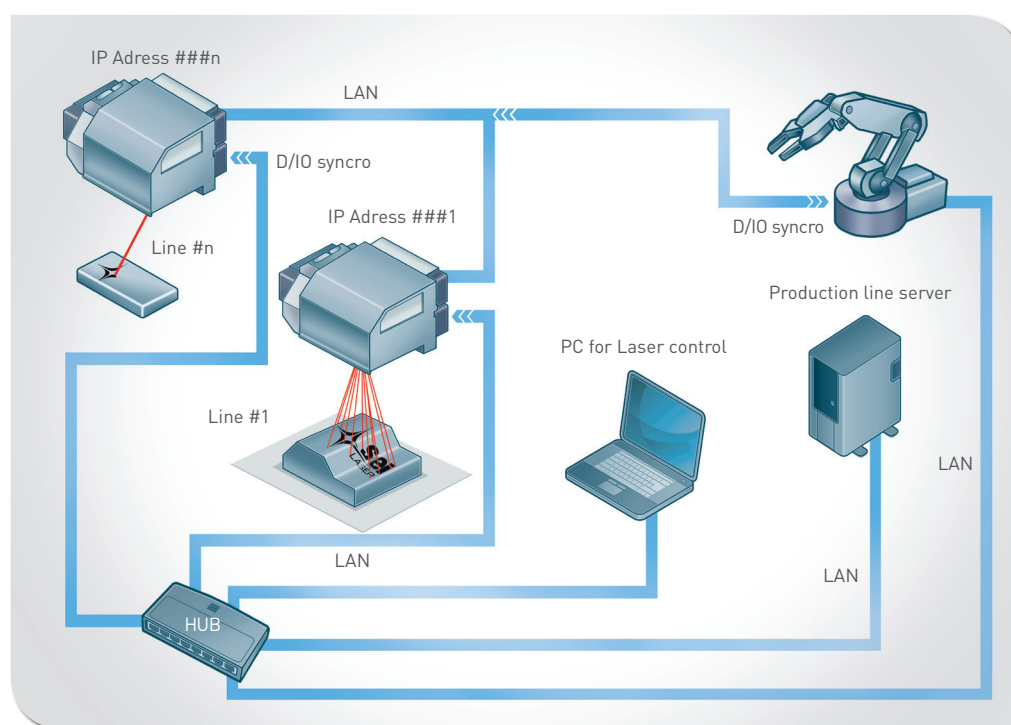
The SEI **LASER³** can be driven by any Personal Computer and the proprietary SEI software ICARO (Windows®).

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.

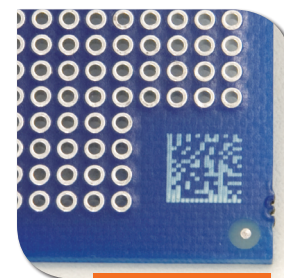


■ PLUG & PLAY HARDWARE CAPABILITY

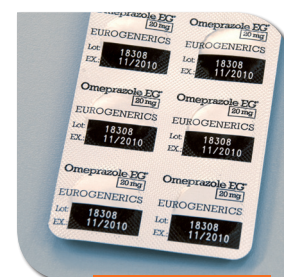
Easy and fast placement into existing or new automatic lines.



Night & Day



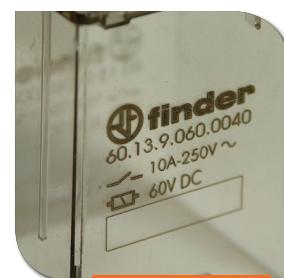
Electronic board



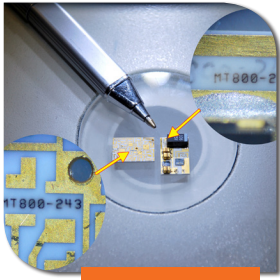
Pharmaceutical



Anti-counterfeiting



Electric components



Micro - coding



Labeling



Telecommunication

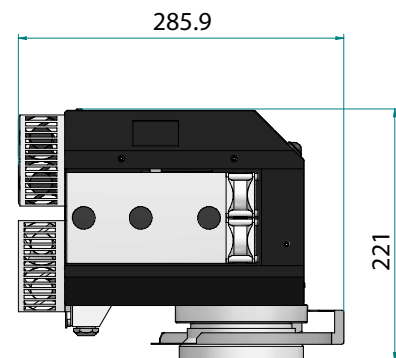
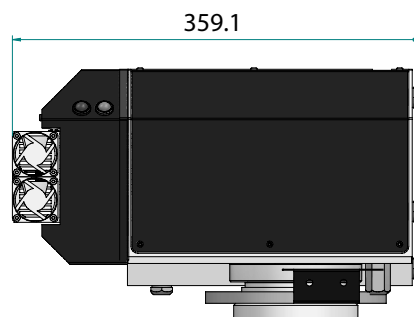


Deep engraving



Jewellery

Model	Laser ³ 12 W	Laser ³ 20 W
Wavelength (nm)	1064	
Technology	multiple diode solid state laser	
Max. power (typical) (W)	> 12	> 20
Pulse repetition frequency (kHz)	0 - 100	
Max. Peak power (kW)	≈ 130	≈ 200
Max. Pulse energy (mJ)	0.9	1.5
Beam quality factor M ²	< 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	
Working 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	forced air-actively stabilized by TEC	



12 W model: as shown
 20 W model: 397 x 286 x 198 mm

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 **Class 4** product

The product is CE marked.

Features and system requirements may change without notice.