

## E-SERIES - EV40 Diode-Pumped Solid State Laser

The EV40 is a high throughput laser marker featuring a Q-switched Nd:YVO<sub>4</sub> diode pumped, air-cooled laser design with high speed digital galvo scanners. This laser provides high quality laser beam characteristics including a long focal tolerance combined with up to 2mJ/ pulse energies and high average powers at 1064nm, allowing these systems to achieve high-speed, rapid deep marking of metals or composite materials on flat and curved surfaces and offers the user best-in-class reliability with a low cost of ownership. In addition, the integrated proprietary **Merlin® II LS** graphical laser software and optimized electronics make these systems the best solution for many high speed marking on the fly (MOTF) applications. The robust mechanical and optical design allows these lasers to operate without any chiller in an industrial environment where shock, vibration, and dust are a concern while maintaining stable output power. The small footprint allows for easy integration into manual off-line and automated on-line configurations, making it ideal for a wide range of industrial marking applications.



### LASER MARKER SPECIFICATIONS

Compliance.....	CDRH
Wavelength.....	1,064 nm
Laser Type.....	Fiber-coupled diode end-pumped, Q-switched Nd:YVO <sub>4</sub> laser
Laser Beam Mode.....	TEM <sub>00</sub>
Positioning.....	Visible Red Diode Light
Optical Fiber Length.....	1.75 meters (5.74 feet) standard
Cooling.....	Air Cooled, active thermo-electric (no water cooling required)
Operating Temperature Range.....	18° to 35°C (65° to 95° F)
Humidity.....	10% to 85% Non-condensing
Mounting Weight.....	approx. 20.0 kg (44.2 lbs.)
Marking head dimensions.....	25.1(W) x 23.4 (H) x 74.3cm (L) (9.9" x 9.2" x 29.2")
Controller dimensions.....	43.8(W) x 21.1 (H) x 44.3cm (L) (17.3" x 8.3" x 17.5")
Controller Weight.....	17.3kg (38.0 lbs.)
Input Power.....	115/230 VAC 50/60 Hz
System Power Consumption.....	< 900W

\*MOTF Version and embedded PC versions available at additional charge

### STANDARD LENS CONFIGURATIONS

FOCAL LENGTH	MARKING FIELD
100mm.....	65mm X 65mm (2.56" X 2.56")
160mm.....	110mm X 110mm (4.33" X 4.33")
254mm.....	175mm X 175mm (6.88" X 6.88")
330mm.....	230mm X 230mm (9.06" X 9.06")
350mm.....	250mm X 250mm (9.84" X 9.84")
420mm.....	290mm X 290mm (11.42" X 11.42")

### SOFTWARE

Software.....	<b>MERLIN® II LS</b> (see page 18)
Operating System.....	Windows® 2000, Windows XP, Windows Vista™ or Windows® 7 with Desktop PC (Std), Optional Laptop
Communication Interface.....	Serial, TCP/IP, I/O



Engraved approximately 4mm deep in aluminum



Features DATA MATRIX™ 2-D Code Marking Capability  
Meets all Department of Defense UID Requirements