



E-Series - EV40 Diode-Pumped Solid State Laser

The EV40 is a high throughput laser marker featuring a Q-switched Nd:YVO₄ 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 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 and an expected diode MTTF of 75,000 hours. 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, CE |
| Wavelength..... | 1,064nm |
| Laser Type..... | Fiber-coupled diode end-pumped Q-switched Nd:YVO ₄ laser |
| Laser Beam Mode..... | TEM ₀₀ |
| Average Power..... | Up to 40W |
| Positioning..... | Visible Red Diode Light |
| Optical Fiber Length..... | 1.75 meters (5.74 feet) standard |
| Mounting Weight..... | approx. 20.0kg (44.2lbs.) |
| Marking head dimensions..... | 22.4(W) x 23.0(H) x 74.3cm(L) (8.8" x 9.1" x 29.3") |
| Controller dimensions..... | 43.9(W) x 21.1(H) x 43.9cm(L) (17.3" x 8.3" x 17.3") |
| Controller Weight..... | 17.3kg (38.0lbs.) |
| Input Power..... | 115/230VAC 50/60Hz |
| System Power Consumption..... | < 950W |
| 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 |

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..... | MERLIN® II LS |
| Operating System..... | Windows® 2000, Windows XP, Windows Vista™, Windows® 7, or Windows® 8 with Optional Embedded, Desktop or Rackmount PC |
| Communication Interface..... | Serial, TCP/IP, I/O |

*MOTF Versions and embedded PC versions available at an additional charge



Engraved approximately 4mm deep in aluminum



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