

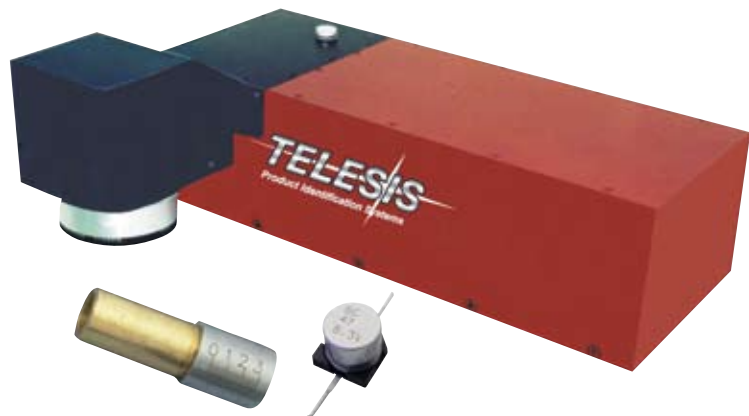


## E-SERIES Diode-Pumped Solid State Lasers EV7

The EV7 is an advanced Nd:YVO<sub>4</sub>, fiber-coupled diode end-pumped laser marking system for applications requiring high beam quality and stability. The EV7 does an exceptional job of high speed marking on delicate and sensitive electronic components, thin metal foils and medical instruments. It's also a very good choice for general purpose laser marking, scribing, trimming, and other material processing applications.

### FEATURES

- Reliable, long, maintenance-free performance
- Compact size and modular construction
- Remote, fiber-coupled pumping diode
- Exceptional beam quality and stable output power
- Active (thermo-electrical) temperature control for the pumping diode and the laser crystal
- Active AO Q-switching
- Air cooling
- Visible "red light" diode for dry run / part positioning
- Large digital display for marker status, settings, and error condition monitoring
- Standard 115/230VAC wall plug operation
- DoD-compliant Unique Identification (UID) marking



**The EV7 laser has an average diode life of greater than 20,000 working hours, for outstanding reliability.**

### Laser Specs

Compliance .....	CDRH, CE, UID
Wavelength .....	1,064 nm
Laser Type .....	Fiber-coupled diode end-pumped, Q-switched Nd:YVO <sub>4</sub> laser
Q-Switch Frequency .....	1 KHz to 100 KHz
Pulse Width (Duration) .....	30 nanoseconds (ns)
Mode .....	TEM <sub>00</sub>
CW Average Power .....	7 W
Long Term Output Power Stability .....	Less than + 2%
Lens (Std) .....	160mm Focal Length 110mm x 110mm Field, (4.33" x 4.33")
Lens (Std) .....	100mm Focal Length 65mm x 65mm Field, (2.56" x 2.56")
Positioning .....	Visible Red Diode Light, 650nm
Optical Fiber Length .....	1.75 meters (5.74 feet)
Cooling .....	Air Cooled, active thermo-electric
Max. Power Consumption .....	Less than 500W
Operating Temperature Range .....	18° to 35°C Non-condensing (65° to 95° F)
Humidity .....	10% to 85% Non-condensing
Expected MTBF .....	20,000 hours maintenance-free diode pumping source
System Weight .....	approx. 24Kg (53 lb.)
Galvo and Rail Assembly Dimensions .....	31.75 cm (W) x 15.72 cm (H) x 42.9 cm (L) (12.5" W x 6.187" H x 16.885" L)
Input Power (selectable) .....	115/230 VAC 50/60 Hz
Optical Fiber Umbilical Length Rail to Controller .....	1.37 Meters (4.53 feet) Std.
Controller .....	Std. Rack mount 43 cm (W) x 14 cm (H) x 51 cm (L), (17" W x 5.5" H x 20" L)

### Software

Software .....	Merlin II LS®
Operating System .....	Windows® 2000, Windows XP, or Windows Vista™
Font Generation .....	True Type Fonts
Barcodes and Matrix .....	2D Data Matrix™, PDF417, BC 39, Interleaved 2 of 5, UPCA/UPCE BC 128, Maxi Code, Code 93, QR Code and Others
Graphic Formats .....	Raster and Vector .BMP, .GIF, .JPG, .WMF, .EMF, .PLT, .DXF
Serialization .....	Automatic and Manual Input Host Interface Capable
Linear Marking .....	Scalable with Letter Spacing Control
Arc Text Marking .....	Scalable and Adjustable
Drawing Tools .....	Line, Rectangle, Circle, Ellipse
Interface .....	Serial, I/O and Host Capable



**SYSTEM CONTROLLER**



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

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