



## E-SERIES EV-25 Vanadate Laser Marking Systems

The new EV25 25w vanadate laser systems are the latest in the E-series line of end-pumped solid state lasers from Telesis Technologies. Not only is the EV25 "the solution" for general marking requirements in the automotive, medical, aerospace and industrial markets, it is also "the choice" for a wide range of applications



requiring deep engraving, quick cycle times or high quality graphics. The distinct advantage of higher peak power and shorter pulse width, coupled with a much longer focal tolerance, make the 25EV superior to fiber lasers in many challenging applications such as those marking high resolution graphics, fine 2D codes, or heat sensitive materials such as silicon, plastics or thin foils.

The air-cooled EV25 provides a diode MTBF of over 20,000 hours and essentially maintenance free operation until pumping diode replacement, which is much less costly than for fiber lasers. The system is entirely air-cooled, avoiding the need for any external cooling system. The diode is located in the controller and coupled by fiber to the resonator and scanning head, allowing for a robust and compact design which is easy to intergrate into a production environment.

### SPECIFICATIONS

Compliance.....	CDRH, CE, UID
Wavelength.....	1064 nm
Laser Type.....	Fiber-coupled diode end-pumped, Q-switched Nd:YVO4 laser
Q-Switch Frequency.....	10 kHz to 100 kHz
Pulse Width (Duration).....	10 nanoseconds
Mode.....	TEM <sub>00</sub>
CW Average Power.....	25 Watts
Long Term Output Power Drift.....	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 (2.65" x 2.65")
Positioning.....	Visible Red Diode Light
Optical Fiber Length.....	1.75 meters (5.75 feet)
Cooling.....	Air-cooled, active thermo-electric
Max. Power Consumption.....	Less than 500 Watts
Operating Temperature Range.....	18° to 30° C Non-condensing (65° to 86° F)
Humidity.....	10% to 85% Non-condensing
Expected MTBF.....	20,000 hours maintenance-free diode pumping source
Mounting Weight.....	Approx. 25 kg (55 lbs.)



### DIMENSIONS

EV25.....	66.3 cm (L) x 23.8 cm (W) x 21.3 cm (H) (26.1" L x 9.4" W x 8.4" H)
Input Power (selectable).....	115/230 VAC 50/60 Hz
Controller Dimensions.....	Std. Rack Mount 42 cm (W) x 14 cm (H) x 46 cm (L) (16.5" W x 5.5" H x 18" L)
Software.....	Merlin II LS™ Software
Operating System.....	Windows 2000, XP, Vista® Desktop PC (Std), Optional Laptop
Interface.....	Serial, I/O, and Host Capable



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