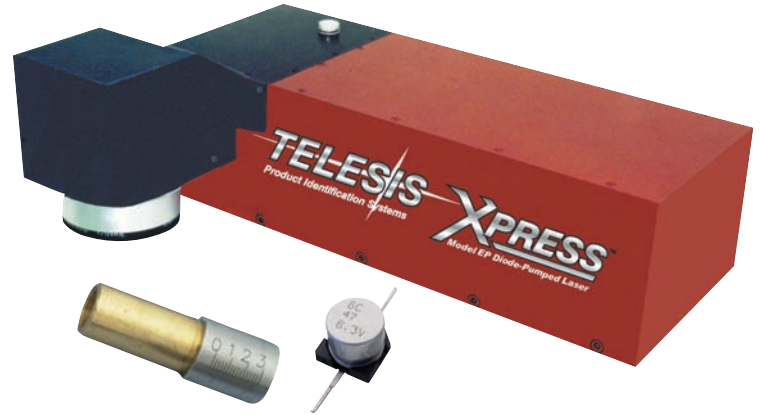


The Model EP is an advanced Nd:YVO₄, fiber-coupled diode end-pumped laser marking system for applications requiring high beam quality and stability. The Model EP does an exceptional job of high speed marking on delicate and sensitive electronic components, thin metal foils and medical instruments. It's 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 Model EP Laser has an average diode life of greater than 20,000 working hours for "best in class" reliability.

Laser Specs

Compliance	CDRH, CE, UID
Wavelength	1,064 nm
Laser Type	Fiber-coupled diode end-pumped, Q-switched Nd:YVO ₄ laser
Q-Switch Frequency	1 KHz to 100 KHz
Pulse Width (Duration)	30 nanoseconds (ns)
Mode	TEM ₀₀
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.
Xpress 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, XP Desktop PC (Std) Optional Laptop
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