

The Xpress™ Model 10EV 10W Vanadate Laser System is the latest advance in the Xpress line of end-pumped solid-state lasers from Telesis Technologies. With a short pulse width, high peak power, and outstanding beam quality, the 10EV is well-positioned to serve more demanding marking or material processing needs. The narrow spot size and good depth of focus allow greater flexibility than achieved with fiber lasers.

The Xpress 10EV has an MTBF of 20,000 hours on the pump diodes and essentially maintenance-free operation until diode replacement. The system is entirely air-cooled, avoiding the need for any external cooling system. The pumping 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 integrate into a production environment.



Laser Specs

Compliance.....	DRH, CE, UID
Wavelength.....	1064 nm
Laser Type.....	Fiber-coupled diode end-pumped, Q-switched Nd:YVO ₄ laser
Q-Switch Frequency.....	10 kHz to 100 kHz
Pulse Width (Duration).....	10 nanoseconds
Mode.....	TEM ₀₀
CW Average Power.....	10 Watts
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 (2.65" x 2.65")
Positioning.....	Visible Red Diode Light (650 nm)
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
System Weight.....	Approx. 30 kg (67 lbs.)
Galvo and Rail Assembly Dimensions.....	80.9 cm (L) x 17.7 cm (W) x 18.0 cm (H) (31.9" L x 7.0" W x 7.1" H)

Input Power (selectable).....	115/230 VAC 50/60 Hz
Xpress Controller.....	Std. Rack Mount 42 cm (W) x 14 cm (H) x 50 cm (L), 16.5" W x 5.5" H x 19.5" (L)

Software

Software.....	Merlin II LS® Software
Operating System.....	Windows® 2000, XP, Vista™ Desktop PC (Std), Optional Laptop
Font Generation.....	True Type Fonts
Barcodes and Matrix.....	2D Data Matrix, PDF417, BC39, Interleaved 2 of 5, UPCA/UPCE BC128, 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, Eclipse
Interface.....	Serial, I/O, and Host Capable



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