

Elk Industries MODEL 3400S
PORTABLE SEMICONDUCTOR LASER SYSTEM

DATA SHEET

OPTICAL SPECIFICATIONS -

LASER WAVELENGTH 638 nm (638 nanometers)
OUTPUT RADIANT FLUX 40 mW (Maximum)
BEAM DIAMETER 2.8 mm (at Beam Attenuator)
DIVERGENCE 2.049 - 40.2 milliradians (Adjustable)
BEAM SHAPE Elliptical
BEAM POINTING STABILITY < 0.080 milliradians
POWER STABILITY < 1.5% (typical)
PULSE FREQUENCY 4.5 KHz @ 40% Duty, Variable, from 2.5 Hz
PULSE AMPLITUDE > 90% Peak Power (Typical)
EMISSION DELAY 5 - 7 Seconds
OUTPUT DURATION (PER BATTERY CHARGE) > 6 HOURS, CONTINUOUS

PHYSICAL SPECIFICATIONS -

	LASER HEAD	SYSTEM UNIT
SIZE	0.750 " Diameter x 3.750" (Long)	5.80" x 5.250" x 2.10" (L X W X H)
Weight	(TOTAL < 4 Lbs.)	
INTERCONNECTING CABLE	> 4 feet, 0.250" Diameter	
LASER HEAD MOUNTING PLATFORM	2.00" x 8.50" x 0.50"	
MOUNTING PROVISIONS	3 Each, 1/4" - 20 THD. HOLES, Axial	
INDICATORS/CONTROLS	KEY CONTROL, EMISSION INDICATOR, PULSE RATE INDICATOR, CW-PULSE MODE SELECTOR BEAM ATTENUATOR, BEAM FOCUS ADJUSTMENT	
METAL FINISH	BRUSHED (SOLID) BRONZE	ANODIZED ALUMINUM (BLACK)
BATTERY CHARGER SIZE	2.00" x 2.40" x 2.40" (Complete with 6 foot long Cable)	
SYSTEM VOLTAGE	4.5 VOLTS, NOMINAL	

PRESS RELEASE

FOR IMMEDIATE RELEASE

DATELINE: MELBOURNE, FLORIDA, DECEMBER, 2007

SUBJECT: MODEL 3400S PORTABLE SINGLE-MODE VISIBLE RED
LASER SYSTEM, CLASS IIIb IS RELEASED BY ELK
INDUSTRIES, LLC

DISCLOSURE:

Cold LASER Therapy is becoming a Huge Industry in America, after it has been mainly used, with tremendous success for Doctors in Europe. It has the ability to treat many types of injuries and disorders, and with very few, if any, "side effects". Here in America, most Insurance Companies already have provisions for Cold LASER Therapy.

Aside from the Therapeutic Applications, this LASER SYSTEM represents a "Breakthrough" in many ways. First of all, it is a very Rugged, Reliable, Portable, Compact, Safe, and "Easy to Use" LASER System. But, what it can **DO** is so VITAL - It surpasses all of the very Common Lower Power LASERS with an Output which is Very Stable and Consistent Operation to 35 - 40 milliWatts (CW), and as much as 50 mW for Peak Radiant Flux in it's Pulse Mode of Operation. Which brings up another point - this LASER, which is completely Portable, can operate in either CW (Continuous) Operation, or a Pulse Mode (On-Off Pulses) with ~40% Duty Cycles. This ability to serve either function leads to greater flexibility as a Scientific, Industrial, General Purpose, or Medical Device.

One of the things Elk Industries is Excited about, with This Product in particular, is the Low Divergence and spot size over a great distance - not exhibited with any other visible Red LASERS with this short of a wavelength which is *also* completely Portable, for use Anywhere, Anytime. Oh, Yes, it can even be used Directly (without any Battery Power) for as long as the user has it connected to the AC Power Adaptor (with an AC Source Provided).

The SEMICONDUCTOR Devices used in this Design offer the Greatest Lifetimes (>30,000 Hours), with Units lasting for 5 times that Lifetime in actual Testing of the SYstems.

"We feel that we have a Portable, Affordable, Powerful, Highly Visible, Useful Tool, which is of Fine Quality - Made to Last a Lifetime, yet stands ready to "Take On" the tasks where Rugged, Reliable, Powerful, Versatile Performance unavailable anywhere else, and certainly NOT with the Affordability of these Systems", states Mr. Elkins, CEO of ELk Industries. "We are planning to add Fully Modulated, and Variable Power Systems (otherwise) Similar to these in the near future".

Features:

1. Highly Visible Wavelength; 638 nm (Bright Red)
2. High Output Radiant Flux; 35 - 40 milliwatts
3. The entire System is Portable
4. Variable Focus with Collimation
5. Single Oscillation Mode Operation
6. Continuous *or* Pulse Mode Functions

7. Low Cost
8. Attractively Styled
9. A wide range of Accessories are available for this Product
10. Holograms can be Made and "Played Back" with this LASER
11. It is Lightweight and Compact, yet Rugged and Durable
12. Each System is "Handcrafted" with attention to detail
13. Long service life from each charge (6 - 10 Hours)
14. The System stores a charge for several Months (when not in use)
15. Fully CDRH Certified, compliant with the 21 CFR 1040.10