Sprout™ is a compact, diode-pumped solid-state (DPSS) laser providing high-power, continuous-wave (CW) power at 532nm in a near-perfect TEMoo mode with extremely low optical noise and excellent long-term stability. Sprout™ is truly a next-generation laser designed and manufactured using many years of experience to provide a sealed, turn-key source of collimated green light with high spectral purity.

A number of key technologies enable Sprout™ to guarantee this performance. Seal™ technology keeps all dirt, dust and moisture out of the laser head to provide years of uninterrupted usage without need for cleaning or maintenance. LockT™ technology locks all laser head optics permanently in perfect alignment. Finally, for those applications requiring near-zero optical noise, Noise Elimination Technology (NET™) is the solution.

The laser head is a monolithic 3-dimensional design for ruggedness and compactness to minimize the space consumed in your lab or instrument. The pump diode package, integrated inside the laser head, has a typical mean time to failure (MTTF) of more than 50,000 hours to minimize cost-of-ownership. Locating the pump diode in the laser head rather than the power supply eliminates the fiber optic delivery cable.

A 3 meter long, flexible, disconnectable control cable connects the laser head to the power supply. The power supply also contains an integrated TEC-based chiller purpose-built for this application to provide increased reliability and reduced overall system footprint. Additional features include automatic laser power control and both USB and RS-232 interfaces for external monitoring, control and remote service.

Sprout™ is a state-of-the-art laser designed for today’s integrated solutions. It combines superb performance and tremendous value for today’s market.
Typical Far-field beam profile

Power stability <0.2% rms over >24 hours

Optical noise <0.02% rms for NET™ version
Laser Head Dimensions

Power Supply-Cooler Dimensions

For more information go to:  www.lighthousephotonics.com