Green Laser Light Source from Shimadzu

Written by Bob Snyder 19. 05. 2008

Shimadzu says its green laser light source is much more compact and energy efficient than earlier models.

Unlike red and blue lasers, green lasers cannot be emitted directly from semiconductor devices using current techniques. Instead, light from a semiconductor laser that emits infrared rays is passed through special optical crystals and changed into green light.

Measuring 2cm in diameter and around 5cm long, the thumb-sized light source is just one-eighth the volume of an earlier prototype. In addition to the high-efficiency optical crystals, eliminating the interior air layer helped to boost light-emission efficiency.

The device can produce 50 milliwatts of green light continuously for 6 hours when powered by two AA-size batteries. Combined with red and blue semiconductor laser devices already commercialized for use in optical discs, the new green laser light source could pave the way for portable, compact projectors roughly the size of a pencil box.

Go Green Laser Light