

High Power Femtosecond Laser



Spectra-Physics, a Newport Corporation brand, introduces Spirit™ 8 W, an industrial-grade high power femtosecond (fs) laser for micromachining applications. The new laser delivers high average power with short 400 fs pulses for fast and flexible femtosecond micromachining, without unwanted heat damage to the processed material. These features make the laser ideal for manufacturing medical devices, flat panel displays, and semiconductors.

“The new Spirit 8 W laser is a robust and flexible tool for demanding cold-machining applications that require high powers and energies for increased micromachining depth and speed, without any sacrifice to machining quality,” said Herman Chui, senior director of product marketing for Spectra-Physics. “This compact laser is ideal for high precision manufacturing of devices such as catheters, biodegradable stents, and high-resolution organic LED displays.”

The Spirit ultrafast laser provides high average power of >8 W in the infrared at 1040 nm with a second harmonic option for generating green femtosecond pulses. The laser delivers ultrashort 400 fs pulse widths with high pulse energies of >40 μ J and is adjustable via computer over a wide range of repetition rates from single shot up to 1 MHz. The highly reliable Spirit is fully automated and has excellent beam characteristics with diffraction-limited TEM00 mode.

Spectra-Physics

408-980-6996; www.newport.com [1]

Source URL (retrieved on 01/29/2015 - 12:35am):

<http://www.mdtmag.com/product-releases/2013/01/high-power-femtosecond-laser>

Links:

[1] <http://www.newport.com>