

PRESS RELEASE

Lasertec Corporation

2-10-1 Shin-yokohama, Kohoku-ku, Yokohama
(Tokyo Stock Exchange, Code 6920)

New Product: Hybrid confocal scanning laser microscope “OPTELICS HYBRID”

Yokohama, Japan, June 20, 2013 – **Lasertec Corporation** has launched a new hybrid confocal scanning laser microscope, “OPTELICS HYBRID,” which combines 405nm laser and full-color confocal optics in one body for high versatility and functionality.

【Description】

OPTELICS HYBRID is a new type of confocal scanning laser microscope, which combines optical technologies of 405nm scanning laser and full-color confocal in a single microscope. The new hybrid microscope is designed to achieve high resolution and multi-functionality at the same time.

The background behind development of this new microscope is a global trend toward enhanced performance of consumer and industrial products for better energy efficiency and environmental protection. Efforts are being made to explore various new materials that can reduce energy consumption in industry areas such as semiconductor devices, metals, resins, and high-tech materials. There are increasing demands for microscopic observation of surface structures and other characteristics of materials during development and production processes in diverse applications with a high level of measurement speed and accuracy.

【Key Features】

Scanning laser microscopes have been widely used in a variety of applications because they can observe and measure surface topography of various samples at the micron scale with ease of operation. Today, however, the needs of nanometer-scale measurement have increased dramatically and, at the same time, higher versatility and functionality are becoming more important because of widening applications. From the perspective of operation efficiency, it is desirable to use a single microscopic device that meets both requirements, but existing microscopes had a limited capability in that sense.

OPTELICS HYBRID is designed to meet such needs by integrating optical technologies of scanning laser microscope and full-color confocal microscope into a single body for the first time in the world. It is a highly versatile microscope with high magnification and resolution

capability and wide field of view while it can perform topography and film thickness measurements using optical interferometry and spectroscopic reflectometer.

Its main features are:

1. High resolutions: A 405nm laser enables high-magnification high-resolution observation to be performed for clear visualization of extremely fine-structured samples.
2. Wide FOV: The field of view is approximately 1.6 times wider than that of the typical scanning laser microscope for higher operation efficiency.
3. Nano-scale measurement: Optical interferometry, spectroscopic reflectometer, and atomic force microscope (AFM) are available for measurement of nanometer-scale structures (AFM is optional).
4. Wavelength selection: A wavelength can be selected from 6 different wavelengths for optimum observation and measurement of each sample.
5. High-resolution full-color imaging: Color confocal optics provides high-resolution full-color images with high depth of field.

Furthermore, OPTELICS HYBRID can process 15 frames per second, one of the fastest in the industry, achieving stress-free operations thanks to Lasertec's high speed scanning technology. OPTELICS HYBRID's user-friendly GUI enables users to perform high-level measurement and analysis easily. By adopting an operation guidance system, OPTELICS HYBRID has eliminated the necessity of manuals. With one click, optimized setting and automated measurement can be performed. OPTELICS HYBRID can be operated using macros to record and repeat skilled operations of expert users.

A variety of options are available for further performance enhancement including: AFM (already mentioned above); high NA objective lenses; software for automated measurement of width, height, surface roughness and others; and software for automated measurement of particles and defects on the entire surface of wafers and others.

【Applications】

Observation and measurement of various samples including semiconductor materials and devices, transparent films, ITO films, MEMS, coating materials and films, inorganic and organic materials, biological samples, metal parts, and plastic parts.

【Main Components】

Microscope, control unit, light source unit, PC and LCD monitor.

About Lasertec:

Lasertec has been providing customers with inspection and metrology tools based on innovative and creative technologies in semiconductor, FPD, and photovoltaic industries since 1962. Lasertec's global support infrastructure assures customers that Lasertec tools always contribute to R&D, pilot and/or mass production to make sure customers maximize their capital investment. For more information, go to www.lasertec.co.jp.

Media Contact: Hiroshi Asai, General Manager, Corporate Planning Office

Customer Contact: Genichiro Kamiyama, Sales Manager, Sales Department II

Phone: +81-45-478-7330 / Fax: +81-478-7333 / E-mail: sales@Lasertec.co.jp