SUPERLIGHT PHOTONICS

WIDEBAND LASER REVOLUTIONIZES SPECTROSCOPY

SLP-1050 Breakthrough Light Source for Next-Gen Spectroscopy Applications

superlightphotonics.com

Spectroscopy

Spectroscopy is a powerful analytical technique that measures how materials interact with light - through absorption, transmission, or emission - providing detailed insights into their chemical composition and physical properties.

Lightsources - halogen or SCG?

Many of today's spectroscopy systems use halogen light sources, which couple poorly into optical fibers, resulting in significant power loss. To compensate, they require long integration times, making them unsuitable for fast-paced industrial or medical applications.

Wideband lasers offer much more efficient fiber coupling, delivering significantly higher brightness than halogen. However, traditional wideband lasers suffer from spectral instability, which often requires averaging across thousands of pulses. This again limits their use in high-speed industrial environments where real-time performance is critical.

SLP-1050 uniquely combines high brightness and high spectral stability enabling high sensitivity/short integration times

SuperLight Photonics to the rescue

Designed to transform how spectroscopy is used in production environments, SuperLight Photonics' latest solution delivers exceptional results compared to traditional light sources. Its spectral stability is unprecedented in comparison with legacy supercontinuum lasers, and its brightness outclasses halogen light sources. This solution delivers high sensitivity and short integration time, in combination with its miniaturized portable form factor, it enables fast inline spectroscopy analysis.

The SLP-1050 has it all

- Replacement for halogen & traditional supercontinuum light sources
- Patented PAD – Patterned Alternating Dispersion ™
- Fast, real-time measurements to support high-throughput industrial processes
- Superior spectral stability - the SLP-1050 improves spectral stability by an order of magnitude vs. legacy supercontinuum sources
- Class IIIb laser enables use in manufacturing environments with minimal safety requirements, allowing operation by non-specialist personnel
- Effortless integration for easy adoption in OEM and industrial setups
- Compact design ideal for space-constrained setups and integration into portable or mobile instruments
- Ideal for inline spectroscopy, ensuring process control without interruption

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SUPERLIGHT PHOTONICS

SLP-1050

Light source in

Spectroscopy

SLP-1050 uniquely combines
high brightness and high spectral stability
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SuperLight Photonics wideband lasers

Exceptional spectral stability and **brightness**

Uniquely positioned to answer the most demanding requirements for spectroscopy in industrial applications

The SLP-1050 delivers an alternative light source for traditional halogen and laser-based spectroscopy systems.
Combining exceptional spectral stability, high brightness, and a compact form factor, it enables real-time, inline testing and analysis, bringing high-performance spectroscopy directly to the production line.

Our products 👉 www.superlightphotonics.com

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Jul25