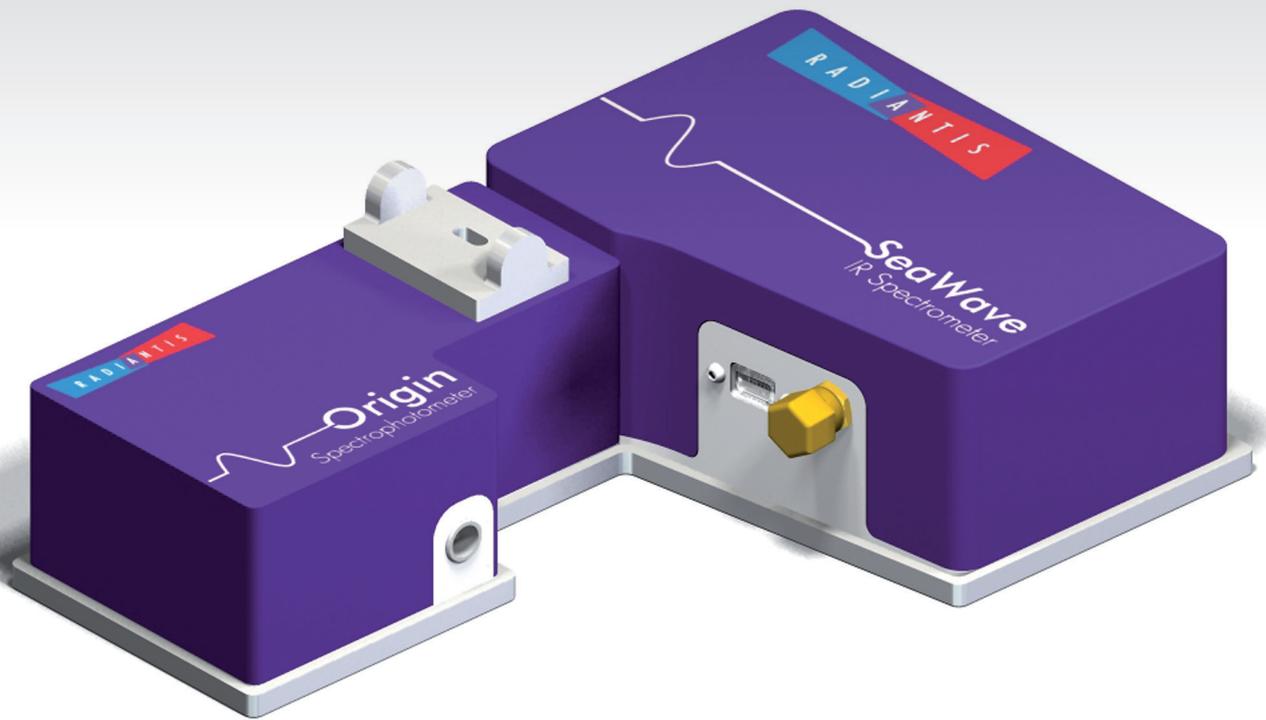


NEW PRODUCT

Origin™ IR Spectrophotometer

Compact, Cost-Effective IR Spectrophotometer



Key Features

- All-in-one portable spectrophotometer, suitable for both, in-line and off-line analysers
- Affordable and rugged, with no moving parts, based on uncooled linear diode array technology and long-life Tungsten-Halogen light sources
- Compatible with solid, liquid and gas samples as well as transmission and reflection spectroscopy
- Wide spectral response in the IR (900 – 1700 nm) and fast readout speed (>1000 spectra/second)
- High resolution (1 – 12 nm) for specific slits and detectors
- Customised and OEM versions available upon request

Applications

- Food industry analysers
- Agricultural product qualification
- Monitoring of petrochemical manufacturing processes
- Remote and industrial process control
- Medical non-invasive assessments
- Photovoltaic material quality control
- Pollution monitoring

Origin™, in combination with the Radiantis® SeaWave™ IR spectrometer, provides a compact and cost-effective spectrophotometer across the IR (900 – 1700 nm). Origin™ incorporates a Tungsten Halogen lamp, a sample holder and a versatile optical layout which delivers light into the uncooled linear diode array spectrometer, the SeaWave™.

The combined product enables reflection, transmission and absorption spectroscopy without any changes to the layout. It can handle solid, liquid and gas samples and can be used in both, in-line and off-line analysers. For off-line analyser applications, Origin™ incorporates a sample holder which can be easily manipulated by the user to position the required sample. For in-line analysers, Origin™ replaces the sample holder with an open path which enables the flow of the production line samples.

High resolution and fast readout response are both key features of the Origin™- SeaWave™ product. A simple user interface and driver software is included which is compatible with Linux and Windows (XP and higher).

Origin™'s compact design combined with the reduced footprint high performance SeaWave provide an ideal tool for IR spectroscopy applications in many markets, including the food, agriculture, pharmacy and petrochemical sectors.



Specifications¹

Characteristics	Origin™/SeaWave™
Origin™	
Light source	Tungsten-Halogen lamp
Wavelength range	900 – 2500 nm
Sample compatibility	Solid, liquid, gas
Power supply	12 V
Dimensions (W x L x H)	54.0 x 35.0 x 96.5 mm (2.12 x 1.38 x 3.8 inch)
SeaWave™	
Detector	Hamamatsu InGaAs linear array (256/512 pixels)
Spectral response range	900 – 1700 nm (default) 900 – 2000 nm (optional) 900 – 2500 nm (optional)
Spectral resolution (FWHM) ⁽²⁾ for complete spectral response range	512 pixels (3 nm – 12 nm) 256 pixels (6nm – 12 nm) Slit size dependent
Signal/Noise Ratio at full signal	4500:1 at 20 ms / 3000:1 at 100 ms (default) Low noise ratio (optional)
Dark noise	10 counts (typical at 20 ms)
Integration time	6 µs to 1 s
Readout speed	>1000 spectra/second
Dynamic range	16 bit (4 MHz A/D converter)
Interface	USB 2.0 Hi-speed
Cooling	Uncooled
Dimensions (W x L x H)	70.5 x 104.0 x 40.0 (2.77 x 4.09 x 1.57 inch)
Software	
Control Software	Dedicated user interface
Driver software	Linux and Windows HP and higher

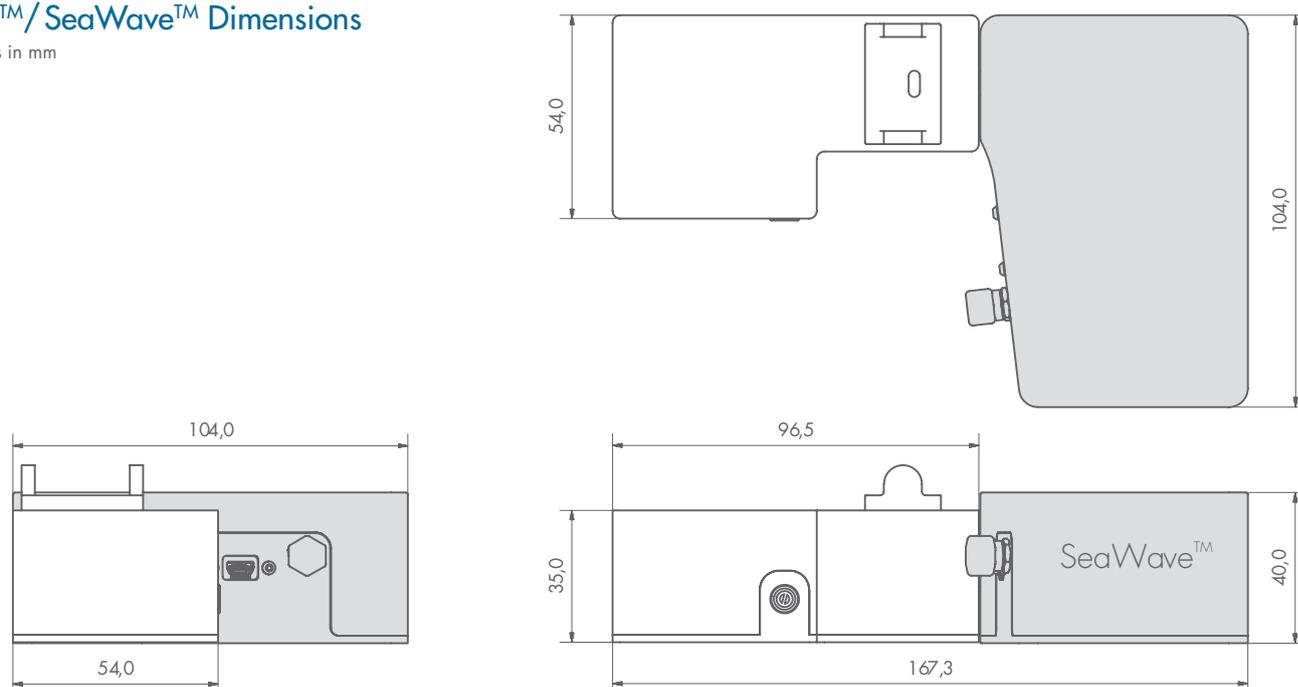
Footnotes

¹ Specifications are subject to change without notice

² Higher resolution available for reduced spectral ranges (grating dependent)

Origin™/SeaWave™ Dimensions

Dimensions in mm



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TE LINTELO SYSTEMS BV



photonics is our passion!

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Photonics is our passion!

Since 1985 Te Lintelo Systems represent prominent suppliers from all over the world for the Benelux countries with well-educated engineers, experience and knowledge.

Over the years we became the specialist in the field of Light metrology, opto-electronic equipment, Laser beam characterization and positioning, Optics, fiber optics and lasers.

Together with our high end suppliers we have the answer for you.

Te Lintelo Systems is your reliable source and long term partner. Service on all levels is for us our daily business. Our team is fully equipped to assist you with finding your best optical business solution. Let's get in touch!

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