

Sol HT 1.7

Near-IR Spectrometer 900 - 1700 nm

The Sol HT line of near-IR spectrometers represents the highest level of performance in the industry. These flagship products give you the highest possible throughput for unmatched sensitivity in low-light applications. Designed for wide-range or Raman measurements, the Sol HT series delivers the results your lab demands.



Do More with Higher Throughput

Whether measuring biological samples or identifying microplastics from the ocean, the Sol HT spectrometers give you the highest performance possible. In the quest to find the best NIR spectrometer, balancing throughput and acquisition speed is critical. Accept no compromises with the Sol HT 1.7.

Premium 512 pixel Array Detector

Sol HT 1.7 utilizes an FC/PC optical connection to the spectrometer that supports the most reproducible fiber connections and helps ensure consistent measurements. Multiple electronic gain modes are ready for use out of the box whether you use our software or develop your own. Designed for OEM integration the Sol HT has no moving detection parts, ensuring years of maintenance-free operation.

TE Cooled for Stable Operations

Cooling is an integral part of achieving high-quality spectra using InGaAs arrays. The Sol HT 1.7 is equipped with a TE Cooling package to cool down to -5°C which suppresses dark noise and improves overall instrument stability. Acquisitions can be performed without the worry of overwhelming dark current.

FC / PC Fiber Optic Input

FC/PC fiber optic connection is the default input method for Sol HT. Unlike SMA905, FC/PC allows for more repeatable fiber insertions. The Sol HT 1.7 comes standard with a fiber patch cord terminated in SMA905 for easy operation and interface with existing sample setups and applications.

Specifications

DC Power Input	5V
Detector Type	Linear InGaAs Array
Pixels	512 x 1 @ 25µm x 250µm per element
Spectrograph f/#	2.2
Dynamic Range	Greater than 8,000:1 single acquisition
Digitizer Resolution	16 bit (65,535:1)
Readout Speed	500 kHz
Minimum Integration Time	250µs
Data Transfer Speed	>300 spectra per second via USB 2.0
External Trigger	Available in Auxiliary Port Functions
Operating Temperature	0°C to 35°C
TE Cooling	-5°C
Dimensions (Approx)	L x W x H 162 mm x 94 mm x 68 mm
Weight	1133 g

Spectral Range and Resolution

Spectral Coverage	Grating	Approx Resolution 40µm Slit
900 to 1700nm	300/1200	~4nm

Software

BWSpec

A spectral data acquisition software with a wide range of tools that are designed to perform complex measurements and calculations at the click of a button. It allows the user to choose between multiple data formats and offers optimization of scanning parameters, such as integration time. In addition to powerful data acquisition and processing, other features include automatic dark removal, spectrum smoothing, and baseline correction. SDK with demo code is available as additional option.

Accessories

Lasers

Fiber Patch Cords

Fiber Sampling Probes

Fiber Sample Holders