

Wavelength range 900 - 1700nm

NIR meter

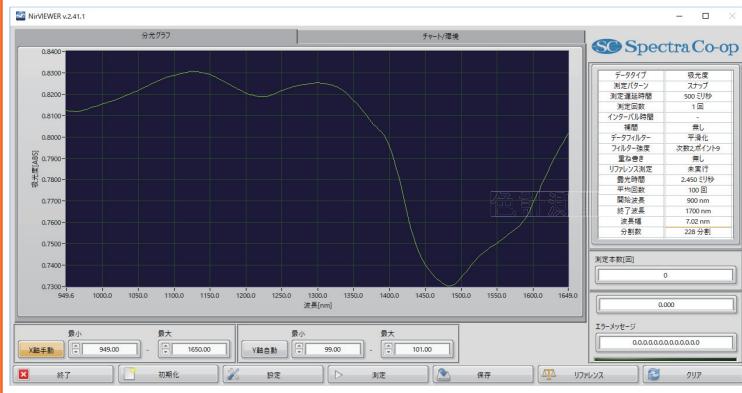
Compact NIR spectrum sensor

NIR Meter

Compact NIR Spectrum sensor



Software



Compact NIR spectrum sensor "NIR Meter" is spectrometer to measure the spectrum using US T.I.'s DLP® technologies to target NIR range 900-1700nm.

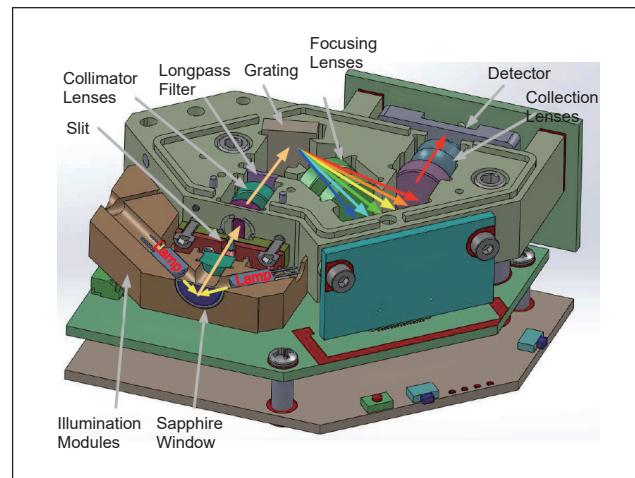
Entrance is sapphire window that incident sample light directly. In addition, the optical fiber connection is also possible by attaching the SMA connector.

Standard software is possible to measure the relative intensity [count] / reflectance [%] / transmittance [%] / absorbance [Abs] as a data type. And it has data processing function such as secondary differential, smoothing, wavelength interpolation.  
In addition, it has a built-in lamp for reflection measurements on both sides of the light-receiving window.

Feature

- Using DLP® technology, realize a low price
- Wavelength range 900 - 1700nm
- Detector is Hamamatsu InGaAs
- High S/N ratio 6000:1
- Power supply USB bus power
- Built-in Tungsten lamp for reflection measurement
- Built-in 885nm long-pass filter for stray light removal
- Entrance is switchable between  
Sapphire window and SMA connector

Inner structure



Spectra Co-op

<http://www.spectra.co.jp>

## Specification

Spectroscopic method	Grating / DLP® technology
Detector	InGaAs
Wavelength range	380 - 780 nm
FWHM	10 nm (typ.)
S/N ratio	6000:1
Internal lamp	Tungsten, 1.4W (typ.)
Entrance	Sappahire Window / SMA connector
Interface	USB
Power supply	USB bus power
Size	100mm(W) x 50mm(H) x 77mm(D)
Weight	300g

\* DLP® is a registered trademark of Texas Instruments.

## Entrance

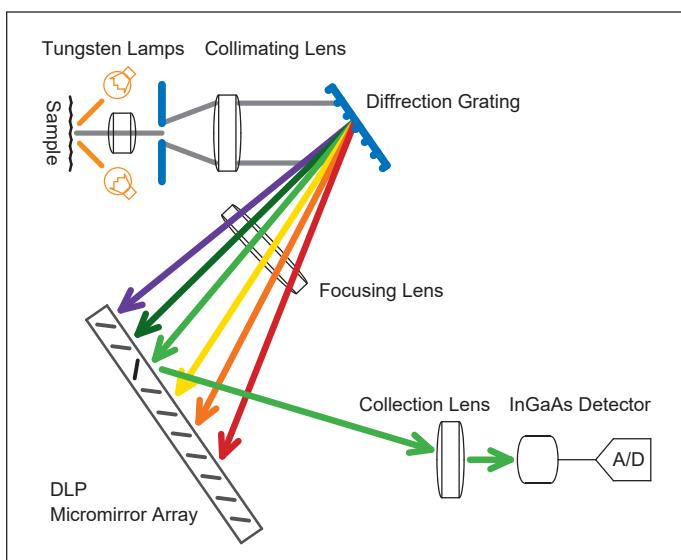
■ Sapphire Window



■ SMA connector



## Grating / DLP® technology



The Transmittanced NIR lights input to the Sapphire Window just before 25um slit and a long pass filter above 885nm, then go to the grating by a collimator lens.

After the grating the each spectra goes to the InGaAS single photodiode by the TI's DLP Micro Mirror Array.