



# USB Spectrometer 2.0

UV-to-Near IR Spectrometers

## Spectra 3965 VIS Spectrometer

MODEL : HO-SP-VIS3965

HOLMARC spectra analyzer VIS 3965 is a visible spectrometer whose spectral range and low stray light render it especially useful for spectroscopic measurements, while its increased sensitivity and throughput make it ideal for low light level applications. This instrument achieves a spectral resolution of about 0.1nm. It is a compact and highly reliable instrument suited for modern labs.



### Specifications

Dispersion Element	Grating
Blaze Wavelength	450nm
Diffraction Efficiency	> 50% (Relative)
Wavelength	390 - 650nm
Groove Density	600.00/mm
Dispersion	9.80nm/mm
Resolution	0.08nm

### SENSOR SPECIFICATIONS

CCD Sensor	B/W line Sensor
Number of Pixels	3648
Pixel Size	8 x 200 micron
Pixel Output Clock	0.5 MHz
ADC resolution	16 bits
Exposure Time Range	0.1ms - 6,500ms
Frame Rate	Up to 138 scans/second
Interface	USB 2.0
Compatibility	Windows 2000XP or higher

### Accessories

Numerous fiber accessories and light sources are available with the spectra analyzer VIS 3965. Please contact us at mail@holmarc.com



Fig. spectra analyzer VIS 3965 with fiber optic light guide and cuvette holder (Spectrophotometric application)

The Holmarc spectra analyzer contains a holographic concave diffraction grating and a one-dimensional CCD detector array. The concave gratings accomplish the task of two optical elements in a single, easily integrated component. They are formed on precision concave substrates, allowing the grating to serve as both the primary dispersive element and the primary focusing element. Concave grating is 600 lines/mm and radius R = 160 mm. CCD is based on a single-line, 3648-pixel CCD chip with USB2.0 (480 Mb/s) interface, so the spectrum is a list of 3648 data numbers, each number representing the number of photons detected by each pixel.

Spectra analyzer interfaces with a computer via Type-B USB 2.0. The entire power requirement is drawn through the 2.0 Type-B USB Connector. By its two port configuration, two light spectrums can be studied at the same time by employing both micrometer controlled input slits which can be done by additional up gradation of the system. Wavelength range(200-1100nm) can be split conveniently according to custom requirements. For example Holmarc Spectra Analyzer 3965 deals with the wavelength range 390-650nm. Contact us with the spectral range you need, we will advise on a suitable configuration.

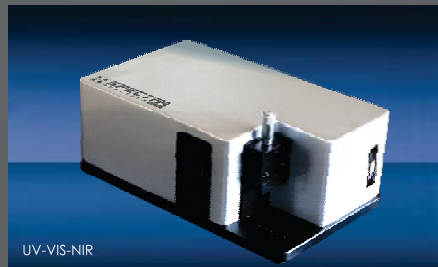


UV

## Spectra 2040 UV Spectrometer

MODEL : HO-SP-UV2040

Holmarc spectra analyzer UV2040 is specially designed whose spectral range and low stray light render it especially useful for UV spectroscopic applications. This instrument can achieve a spectral resolution of about 0.06nm. It is a compact and highly reliable instrument suited for modern labs.



UV-VIS-NIR

## Spectra 1980 UV-VIS Spectrometer

MODEL : HO-SP-UVVIS1980

Ideal for many UV & visible applications ranging from 190-800nm. CCD Based Spectrometer offers a 3648 element detector, built-in 16-bit digitizer, USB 2.0 interface and an external trigger input. Variable micrometer controlled slit is provided for flexibility in resolution and signal detection. Spectral resolution of this instrument is better than 0.5nm.



VIS-NIR

## Spectra VIS-NIR Spectrometer

MODEL : HO-SP-VISNIR

Spectra VIS-NIR is a concave grating based spectrometer. It has consistent resolution throughout VIS-NIR wavelength range due to the aberration corrected flat field special grating with high performance 16 bit linear CCD. Spectral resolution of this instrument is around 0.5nm. Wavelength range is available up to 1100nm.