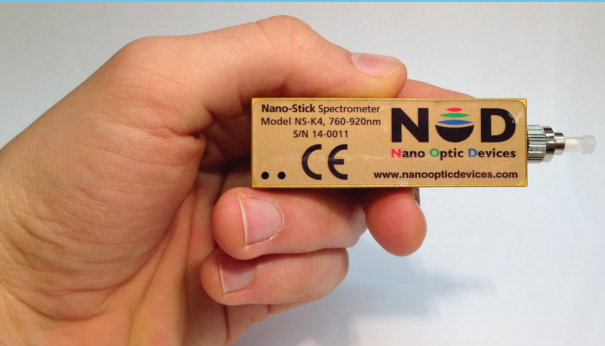


Introductory price  
**\$2,200.**  
 For limited time only.

## Nano-Stick Spectrometer

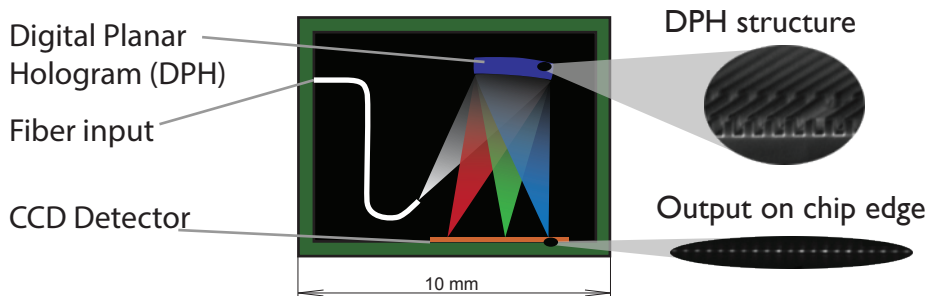
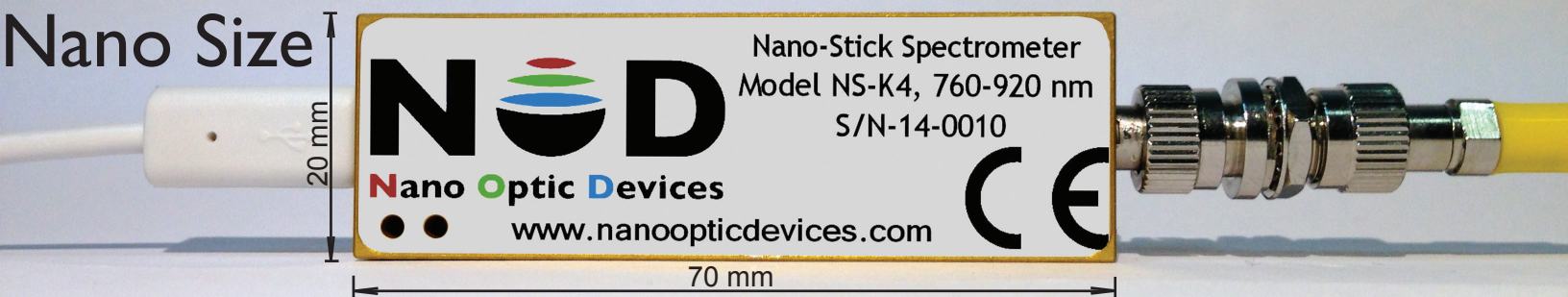
Revolutionary Digital Planar Holography (DPH): Optics Integrated on wafer chip



### Features:

- Optics Integrated on wafer chip
- High Resolution (0.15 nm) in USB memory stick size package
- Never needs re-calibration
- Insensitive to temperature & vibration changes
- Selection of standard and custom wavelength ranges
- Perfect for hand held applications, USB powered

The Nano-Stick Spectrometer uses revolutionary Digital Planar Holography (DPH) technology that has been developed and patented by Nano Optic Devices (NOD). The DPH technology allows for managing, processing and guiding light inside an ultra miniature integrated optic device that is fabricated on a wafer chip. This tiny wafer chip includes an optimized DPH hologram that is fabricated with microlithography methods using a CMOS manufacturing process. A typical DPH hologram inside of the Nano-Stick Spectrometer consists of millions of nano-features, embedded inside a planar waveguide to perform the desired spectral dispersion of input light and focusing of spectral components onto a linear CCD detector array. Digitized signals are transferred via a USB interface to a computer for processing and display.



### DPH Chip

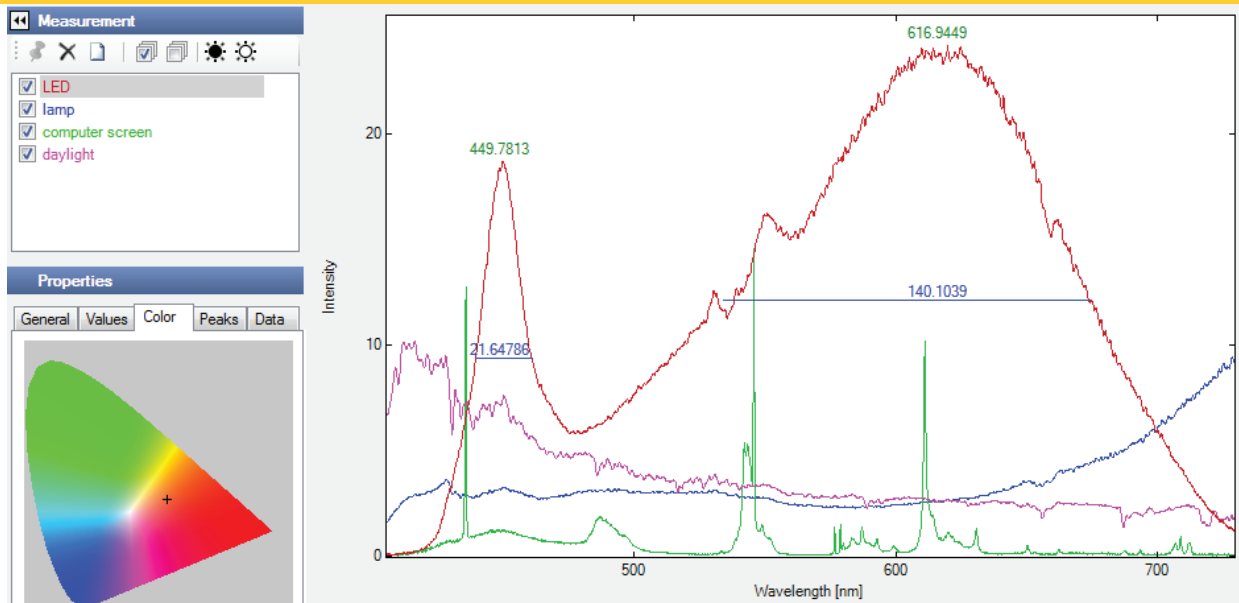
- Integrated Optics on a Wafer Chip
- Highly Repeatable Imprints
- Very Low Costs in Volume
- Customizable Optical engines
- Optical Designs unable to be copied

## Technical specifications

Optical Input	Single Mode Fiber	Integration Time	5 $\mu$ s - 30 s
Available band	500 - 1100 nm	PC Connection	USB 2.0
Spectral resolution	0.07 - 0.5 nm	Software	Windows 8 and earlier
A/D converter	16-bit, 15 MHz	Power	USB
Signal/Noise	400: 1	Dimensions	70x20x10 mm
Stray Light	<0.2%	Weight	50 g
Fiber Connector	FC/PC	Operating Temperature	10 - 50 $^{\circ}$ C
Transfer speed to PC	20 ms per spectrum	Digital IO	4 I/O's & trigger

Standard Models	NS-K5	NS-K6	NS-K4	NS-K19	Custom
Spectral Band (nm)	630 - 690 & 760 - 850	550 - 800	760 - 920	915 - 1100	user-defined range
Resolution (nm)	0.18	0.15	0.25	0.21	up to 0.07

## Nano-Clarity operating software (included)



- Acquire & Display multiple spectra
- Auto exposure control with dark spectrum interpolation
- Dark spectrum interpolation

- Automated wavelength calibration
- Dynamic peak finder - no need to set a threshold level
- Includes Software development kit (SDK)