

## NANOPLASMON PORTABLE SPECTROMETER



### Areas of Application

The device is to be used for implementation of real-time bio- and chemosensing techniques in laboratory conditions; spectral investigation of nanosized objects; study of organic and inorganic thin films; and for measurement of refractive index

### Advantages

There are no analogs in Ukraine. The device uses localized surface plasmon resonance phenomenon; enables studying nanostructures and molecules of different types using both photometric cuvettes and substrates of variable geometry; enables light polarization control; has a semi-automatic loading of liquid samples; can use both built-in and external spectrometer

### Specification

Refractive index measurement range	>1.0
Refractive index sensitivity	0.0005
Wavelength maximum detection accuracy, nm	0.02
Maximum wavelength scan range, nm	400 – 900
Number of optical channels	1
Overall dimensions, mm	200×250×100
Weight, kg	3
Compatibility	USB, Windows XP/ Vista/7/8/10

### Stage of Development.

#### Suggestions for Commercialization

IRL3, TRL4

Manufacture, delivery, warranty service, and staff training, upon request

### IPR Protection

IPR1, IPR2

### Contact Information

Anna S. Stanetska, V.Ye. Lashkaryov Institute of Semiconductor Physics of the NAS of Ukraine;  
+38 044 525 60 43, +38 099 292 66 60, e-mail: stanetska\_anna@ukr.net