

SENSORY DEVICE BASED ON SURFACE PLASMON RESONANCE PHENOMENON



Areas of Application

The device is to be used for carrying out real-time biokinetic, immunosensing, and biosensing measurements; studying nanoobjects like nanoparticles or nanotubes; studying adsorption, corrosion, and electrochemical reactions; measuring refractive index of organic and inorganic films; detecting gas and liquid composition; realizing chemosensor applications; and controlling motor oil quality and wear of meeting parts

Advantages

The device has no counterparts in Ukraine. It requires low doses of substances to be tested (in ml), is compact and cheaper than foreign analogs

IPR Protection

IPR3

Specification

Number of channels	2
Refractive index measurement range	1.0–1.45
Refractive index sensitivity	0.00005
Maximum time resolution of kinetics measurements, s	
Tracing measurement mode	2
Slope measurement mode	0.2
Angle-of-incidence precision, angular s	5
GaAs semiconductor laser as light source	650 nm, 2–3 mW
Overall dimensions of the measurement unit, mm	215×130×100
Weight, kg	2.5

Stage of Development.

Suggestions for Commercialization

IRL3, TRL4

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

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