

OPTICAL DEVICE FOR ACTIVE REMOTE SENSING OF HAZARDOUS CHEMICAL AND BIOLOGICAL AGENTS

Areas of Application

This device can be installed on unmanned aerial vehicle (UAV) for detection and identification of biological and chemical agents, various toxins and viruses; for gaging of soil contamination and air pollution. Measurement results can be used for detection of hazardous situations and for risk assessment

Specification

Grid-type hyperspectrometer;
sensor (detectors): CMOS or CCD camera;
sources of radiation: laser diode.

Spectral range, μm	0.45–1.1
Wavelength resolution, nm	1–2
ADC bit capacity, bits	14



Advantages

Similar systems have been developed in US for NATO. There are no analogs in Ukraine. The device uses optical and laser radiation reflected from vegetation to improve identification of dangerous biological and chemical agents. The use of a group of interacting UAVs enhances the identification of hazardous components

Stage of Development.

Suggestions for Commercialization

IRL3, TRL3
Manufacture, delivery, warranty service,
and staff training, upon request

IPR Protection

IPR3

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