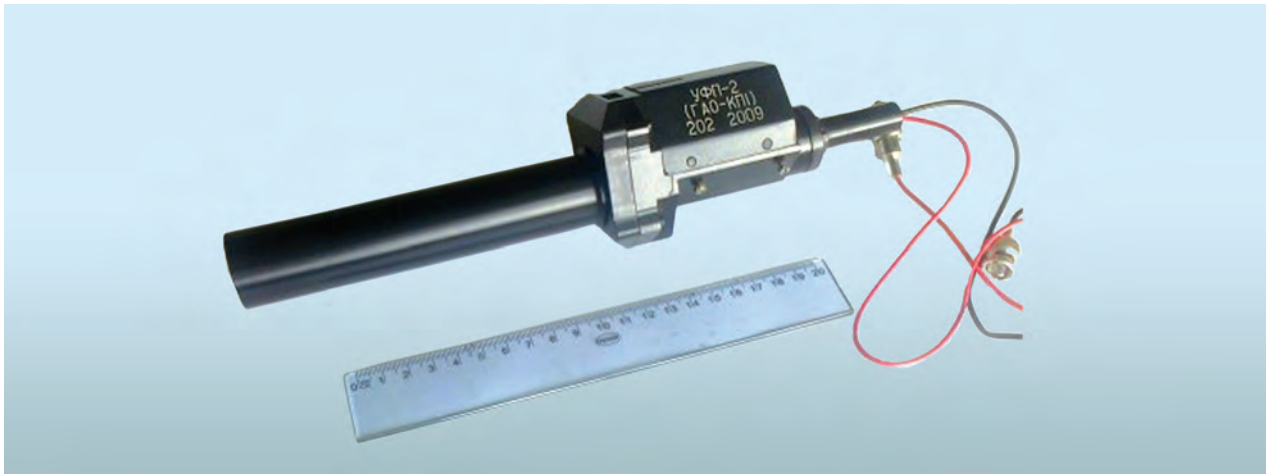


COMPACT UV POLARIMETER FOR STUDYING AEROSOL COMPONENTS OF THE EARTH'S STRATOSPHERIC OZONE LAYER



Areas of Application

The UV polarimeter enables to obtain from outer space some physical characteristics which can be used in meteorology, climate studies, and ecological innovations

Specification

Spectral range, nm	240–290
Sensitivity, A/W	10×10^{-3}
Accuracy, %	0.1
Power consumption, W	20
Volume, l	0.3
Weight, kg	0.5

Advantages

The space studies of the Earth's ozone layer with the use of UV polarimeter installed on the board of artificial Earth satellite are unique in the world practice. The information obtained from them enables to clarify the mechanisms of changes in the Earth's ozone layer and those of the formation of ozone holes in order to develop and to make more efficient international efforts for preventing this disastrous phenomenon

Stage of Development.

Suggestions for Commercialization

IRL5, TRL5

A working model of compact UV polarimeter that can be used as a framework for creating artificial satellite-borne polarimeters to study the aerosol component of the Earth's stratospheric ozone layer

IPR Protection

IPR1, IPR3

Contact Information

Petro V. Nevodovskyi, The Main Astronomical Observatory of the NAS of Ukraine;
+38 044 526 47 61, e-mail: nevod@mao.kiev.ua