

Hardware-software Complex for Golay Detector Operation with Personal Computer

The complex is a specialized software and electronic unit connecting Golay detector with personal computer through USB interface. It is served for detecting, processing, and analyzing optoacoustical detector signals. Also the complex permits to increase sensitivity of the Golay cell based detection systems.



Main features of the complex

- no need in expensive devices for signal detecting and processing (oscillographs, spectrum analyzers and so on);
- optimal for mobile measurements out of a laboratory;
- flexible input system for calibration coefficients. This system considers all main factors which have effects on energy level determination accuracy at input of the Golay cell;
- calculates energy using calibration constants at output of the Golay cell in real-time mode;
- analyzes signal spectrum at output of the Golay cell and extracts desired signal and noise power spectrum;
- minimizes induced noise as much as possible by improving signal/noise ratio of the set in general;
- registers small signals which cannot be processed with traditional analyzing methods;
- automatically saves the measured data;
- versatile as it suits to all Golay detector models produced by Tydex.

Technical Specification:

Function	- transformation of an analog signal of Golay cell to a digital signal; - analysis of the measured data; - PC output and storage of processed results.
Interface output data	USB 2.0
Data input port	BNC type
Power supply	USB 2.0/1.1 port
Indication	Power LED (green light)
Weight, kg	0.15
Overall size, mm	120 x 73 x 25
Color	Black
Required Operating System	Windows XP/7

