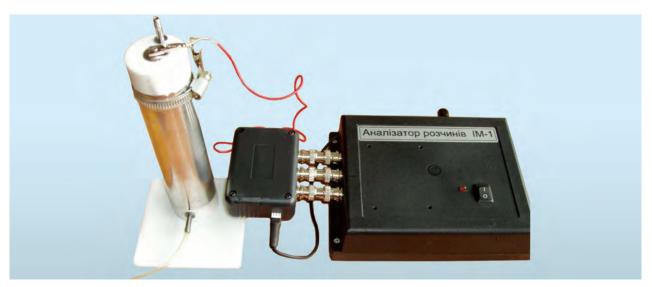
IM-2 PORTABLE IMPEDANCE ANALYZER OF SOLUTIONS



IM-2 portable impedance analyzer of solutions with a special electrolytic cell

Areas of Application

The device is to be used for studying electro-physical characteristics of weak-conductive liquid solutions with a specific resistance of up to 10^{12} – 10^{13} Ohm · cm and materials with a low dielectric constant (gasoline, benzanol mixtures, oils, etc.) at liquor and spirits factories, motor gasoline plants, and in sanitary control services

Advantages

Portability, lower cost as compared with RCL-meters, and original techniques developed for rapid quantitative analysis of multicomponent liquid mixtures with the use of device

IPR Protection

IPR3

Specification

Maximally permissible error of active and reactive components of impedance is $\pm 20\%$ at minimum frequency and $\pm 10\%$ at maximum frequency; sample block connected via coaxial cables; connected to PC via RS232 or USB interface.

Range of operating $0.5 \,\mathrm{Hz} - 150 \,\mathrm{\kappa Hz}$ frequencies with a pitch of 1 Hz

Maximally possible

deviation from fundamental

harmonic, % ± 1 Power supply $\pm 12 \text{ V} / 0.5 \text{ A}$ Dimensions, mm $300 \times 300 \times 70$ Weight, kg ≤ 0.5

Stage of Development. Suggestions for Commercialization

IRL6, TRL6

Manufacture, supply, and maintenance of device; measurement techniques provided, upon request

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