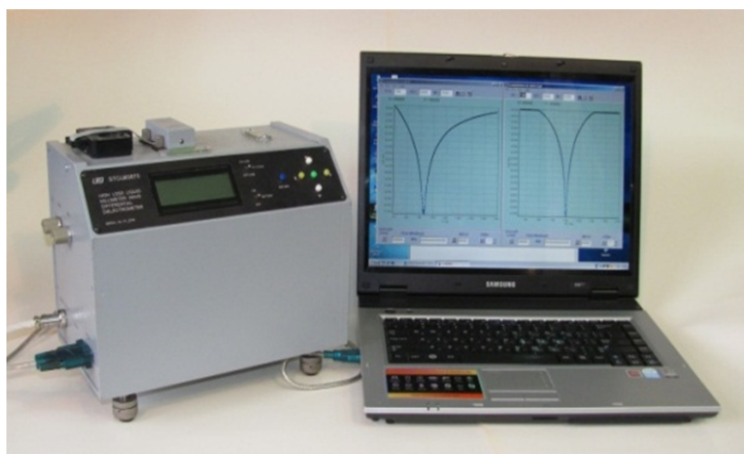


# DIELECTROMETER OF MILLIMETER RANGE TO DETERMINE THE PHYSICAL PARAMETERS OF AQUEOUS SOLUTIONS



Appearance of waveguide-differential  
dielectrometer



Measuring cells for reference fluid  
and test fluid

## Areas of Application

Determination of physical parameter (complex permittivity) of highly absorbing liquids (liquid food, active biological fluids) and control of the progress of enzymatic reactions in real time. Quality control of liquid environmental samples.

## Specification

Complex permittivity is determined by measuring the difference in the attenuation of electromagnetic waves and their phase shift in two cells of the dielectrometer, one of which contains a reference liquid (water) with known complex permittivity, and the other contains the liquid under study. The dielectrometer allows to determine differences of the order of 0.5% in the value of real and imaginary parts of complex permittivity between two strongly absorbing liquids.

## Advantages

Autonomy and mobility, ease of operation and high speed of measurements. As well as the possibility of dynamic control over the processes in liquids (the course of biochemical reactions). Almost all similar meters exist in the form of stationary laboratory installations designed for scientific research. Our device can work in the field.

## Stage of Development

IRL6, TRL4, TRL5.

## IPR Protection

IPR1

## Contacts

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