

The invention relates to measuring technology and can be used for measuring the impedance components of liquid products to determine their quality.

The device for measuring the impedance components of liquid products comprises a sinusoidal signal generator (1) with the frequency F_G , having one input contact connected in series to a resistor (2), an amplifier (12), having one output contact connected to the second contact of the resistor (2), and the second input contact together with the second output contact of the generator (1) and the common point of a converter impedance (6) – to the common wire, a converter (6), which comprises an operational amplifier (7), having the inverting input connected to the output contact of the converter (6) and the non-inverting input – through a resistor (9) to the common wire, a variable resistor (8), connected in the negative feedback of the operational amplifier (7), and a differential amplifier (10), having one input connected to the output of the operational amplifier (7), and a phase shifter (11) with a phase shift of 90° , having the input connected to the output of the differential amplifier (10), and the output, together with the second input of the differential amplifier (10) and the second input of a phase meter (13) – to the non-inverting input of the operational amplifier (7). The phase meter (13) has one input connected to the output of the amplifier (12). The device further comprises an electrochemical cell, formed of two metal plates (3, 4), each with an area S , placed in parallel in a glass vessel (5) at a distance L from one another, one of which is connected to the second contact of the resistor (2), and the other – to the second output contact of the converter (6).

Claims: 1

Fig.: 2

