

Device for determination of rate and qualitative composition of substance relates to area of electrical measurements and can be used at solving problems on measurement of parameters of substance flow. New in the device for determination of parameters of substance is possibility of simultaneous independent determination of rate of flow of substance and its quantitative composition without possibility of direct contact with substance and removal of error of measurement of substance flow rate related to change of electro-physical properties of substance in flow. At determination of rate of substance flow one uses main receiving channel of the unit that consists of mixer, selective amplifier-restrictor and transformer frequency-voltage. At determination of electrophysical parameters of substance flow one uses supplementary receiving channel of the unit that consists of calibrated phase changer, phase detector and adder. Signals of the main and the supplementary channels come to inputs of analog-digital transformer output digital code of which includes information on rate of liquid flow and does not depend on its electrophysical parameters. Information on electrophysical parameters of substance in flow is in signal at output of phase detector of supplementary receiving channel.