

The present invention relates to devices designed for assessing thermal energy consumed by individual heating systems and can be used in municipal economy. The proposed device contains a semiconductor thermoelement made as a diode array, two digitally-controlled switching units, a computing unit, a displaying unit, an analog-to-digital voltage converter, and additionally, a digital-to-analog converter with a voltage output signal, two current-to-voltage converters, a heat-transfer medium flow rate meter, a differential amplifier, and two additional digitally-controlled switching units. The elements of the columns and rows of the thermoelement diode array are connected to the corresponding inputs of the first and second switching units. The output of the analog-to-digital converter is connected to the input of the computing unit. The outputs of the computing unit are accordingly connected to the control inputs of the first and second switching unit and the inputs of the displaying unit. The inputs of the additional switching units are connected to the corresponding elements of the columns and rows of the thermoelement diode array. The output of the second switching unit is connected to the input of the first current-to-voltage converter and the first input of the differential amplifier. The output of the differential amplifier is connected to the input of the analog-to-digital converter. The output of the digital-to-analog converter is connected to the inputs of the current-to-voltage converter, and the control input is connected to the output of the computing unit. The control inputs of the third and fourth switching units are connected to the corresponding outputs of the computing unit. The inputs of the first and fourth switching units are connected to the common point of the circuit of the proposed device. The present invention provides a possibility to increase accuracy in determining consumed thermal power as the result of increased accuracy in measuring the difference of temperatures at the inlet and the outlet of a heating system.