MP2200 ANALOG TO DIGITAL CALCULATOR

MP2200 is one module of analog computation 16-bit digital, configurable for applications of calculation in flow measurement, fluids energy, in combination with the primary elements such Pitobar, swirl, vortex, Prior, nozzle, etc.

The calculations are parsed through software designed by our technical office, in compliance with international standards.

Up to 4 input variables as for many process parameters (pressure, DP, temperature etc), n. 2 analog outputs the results of calculation, such as flow rate and totalized).

MP2200 instruments can be assembled in to panel case or field box. Power supplies on demand.

CUSTOM PRODUCT

TECHNICAL SPECIFICATIONS

Microprocessor math unit can solve easily and cost-effectively any problem of calculation for analog and digital signals correlated in functions by themselves or database. Essential for calculating averages, differences, integrations of signals, etc. data solutions performed to be sent to an indicator, recorder or directly to personal computer, acting as an smart data acquisition card.

Our MP2200 enables 4 inputs for analog signals, 2 inputs for digital signals, two outputs for analog signals, 2 outputs for digital signals and RS232 or RS485 interface to direct connection to a PC one or more modules MP2200 on the same serial line.

The technology used for the storage allows to maintain programming even in the absence of power main supply for a period of at least 10 years, and it allows to reprogram the module directly for new operations as many times as it is necessary.

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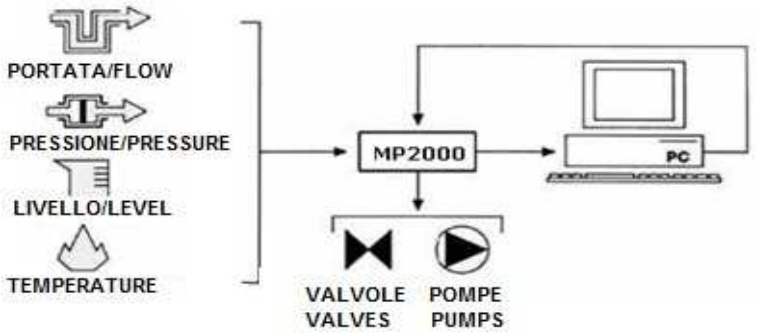
APPLICATION EXAMPLE

ANALOG OR DIGITAL ACQUISITION FORM

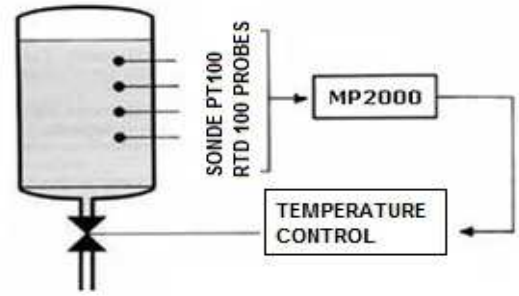
An example of the wide use of the calculation module MP2200, is certainly that of the acquisition and transmission data on a serial line to a Personal Computer for analog or digital signals coming from transducers process, as in the case of flow measurements, pressure, level, temperature, etc. The MP2200 module over the serial line transmission, can perform mathematical calculations, logic input signals and send the output monitors and recorders.

The signals from the ranging transducers to the analog inputs of the MP2200, which in turn may employ or less in desired mathematical and logic operations and then retransmitted via serial port to the PC values corresponding to their display. For its part, the PC can also transmit also via serial module MP2200 the desired information to control external devices such as valves or pumps, connected to the analog outputs of the module.



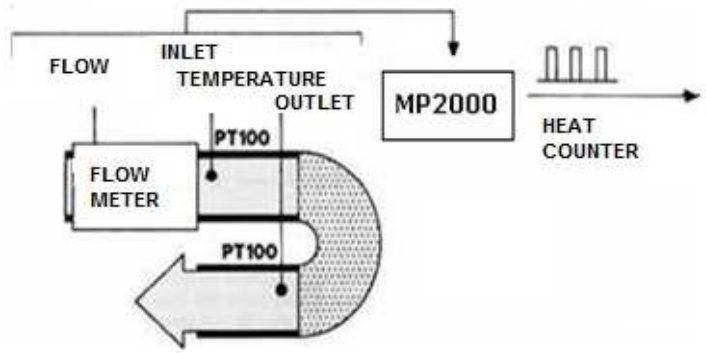
ANALOG SIGNALS AVERAGE

Another example of widespread use is the average calculation of the values provided by transducers process, as in the case of different RTD temperature probes placed at different heights in a tank of liquid. The MP2200 module can evaluate the average of the values corresponding to the analog signals from the probes and to command based on that average the temperature controller.



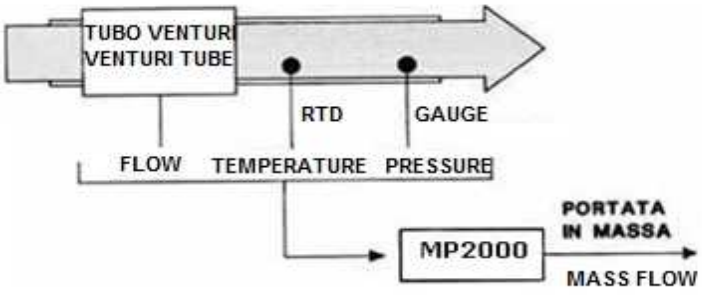
THERMAL ENERGY METER

Among the many examples in the field of integrations of analog values where the calculation MP2200 module finds use is highlighted the realization of a calorie counter or frigories. As energy counter 'MP2200 is able to totalize the thermal energy developed in a pipeline loop used for example for heating, making the difference between the two high and low temperature provided by two RTD sensors, and multiplying with the flow rate value performed by one magnetic flowmeter.



GASES FLOW METER

In different applications it is required in determining the gravimetric flow, for example in kilograms of a gas such as water vapor or methane. The MP2200 module can provide at its output an analog signal proportional to fluid mass, by combining the gas flow rate, measured with a Venturi tube or with a primary flange or a Vortex, with the temperature and the pressure of the same.



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