

KEP One Minute Training

INTELLECT 69 SERIES

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What Is It?

The Intellect 69 is actually a series of integrating totalizers and ratemeters that take an analog signal input. A typical analog signal would be 4-20mA, 0-20mA, 1-5V, 0-5V, or 0-10V. These signals are given off by various flow meters and sensors and can be put directly into the INT69.

The INT69 can be used as a totalizer or a ratemeter or as both at the same time. For instance, you might want to see both your total gallons produced along with the rate at which you are producing (per second, minute, or hour). It is scaled by assigning a high and low number to the analogous high and low input. Let's say that the sensor gives off an output of 4mA (milliamps) when it measures 0 gallons and 20mA when it measures 10 gallons. Through the front keyboard, you put '0' for 4mA and '10' for 20mA and you are done. For outputs from something like a differential pressure cell (like what is used with an orifice plate flow meter), we offer an option for inputs needing square root extraction and perform this right in the INT69.

The INT69 has a view button on the front, which allows the user to toggle through the following displays: Integrated total, rate, peak, and valley. We also offer 2 relay outputs that can be tied to the rate (even a range of the rate) or the integrated total. These outputs are 2 Form C SPDT 10 AMP @ 120/240 VAC or 28VDC. There is also 24VDC @ 50mA available to power external transmitters.

Finally we offer an analog output option, RS-232 or RS-422 communications, and operating voltages of 120 / 240 VAC or 12 to 15 VDC.

Where Is It Used?

The various INT69 models can be used in any simple rate meter or totalizing applications where there is an analog signal to monitor or display.

Tank Level:

A customer of KEP's installs tanks to hold liquids for a manufacturer that needs to store these liquids in a central location that is close but off-site from the main manufacturing building. A typical farm might have 10-15 tanks and these need to be monitored inside the plant. A simple level sensor gives off a 4-20mA signal that is analogous to the level inside the tank. A separate INT69 is used to read and display this level for each tank. There are two outputs available that can be programmed from the front keyboard for high and low level outputs for example:

Flow Applications:

During flow processes, 3 variables are often monitored: flow rate, pressure, and temperature. These variables can be transmitted to separate INT69's to locally display these values.



Typical Applications:

Pressure Monitoring

Temperature Monitoring

Rate Meter and/or Totalizer