Using a Portaflow204/216/300 as an energy meter with the portable CALECST

It is possible to use a Portaflow 204/216 or 300 as an energy meter with the Micronics Ltd customised portable CALECST heat integrator.

Setting up

1. Setup the flow meter as described in the user manual making sure to set the pulse output to forward total and 100L per pulse.
2. Locate the correct pulse output cable for your Portaflow for connection to the portable CALECST heat integrator, connect the cable as in the diagram on the left and as shown on the portable CALECST heat integrator enclosure.
3. Clamp the temperature probes to the hottest and coldest points in the system and connect to the portable CALECST heat integrator as shown on the enclosure.
4. You will now be able to observe energy use on the portable CALECST heat integrator screen and access other information such as hot and cold temperatures, Delta T, Power etc. Please refer to the CALECST heat integrator manual for further options.

Logging Kwh use with the optional PULSE 101 datalogger

1. Select the portable CALECST heat integrator pulse output cable. It is identified by having a red and and a black cable for connection from the portable CALECST heat integrator (as shown on the enclosure) to the Pulse101 datalogger terminals .
2. Install the Pulse101 datalogger software and follow the instructions for starting the Pulse101 unit to record pulses, this can be accomplished very quickly by connecting the Pulse101 via USB to your personal computer and clicking on _Device/Start Device_.
3. Make sure to set the logging period to accommodate the length of time you intend to log, the default is 1 minute per sample period, this can be increased as required to allow for a longer logging time.
4. Once you have started the datalogger, connect the black cable to the +terminal and the red cable to the –terminal of the logger, you will now be logging 1 pulse per Kwh energy used.
5. Return to the unit at the end of your chosen

logging period, connect the Pulse101 to your computers USB and download the data by selecting _Device/Read device data._

CALEC ST portable energy meter

PT100 HOT SIDE

PT100 COLD SIDE

Micronics portable clamp-on flow meter

PULSE OUTPUT (SET TO 100L PER PULSE)

9VDC   Pulse   4-20mA

DATA LOGGER (Optional)

TO AND FROM PERSONAL COMPUTER