



ULTRASONIC MEASUREMENTS

Calorific Value and Temperature Measurement

▢ PRINCIPLE

Calorific value and temperature measurement is an option of the **DigiSonic** and **UF 322** flowmeters. The energy generated or consumed by a heating or cooling circuit is calculated from the flowrate and the upstream and downstream temperatures.

On **DigiSonic P** and **E** (portables), the temperatures are measured with an external, plugged-in accessory. It can be ordered separately (ref. DP200).

On **UF 322** (fixed), the flowmeter needs to be ordered with a specific electronics.

▢ APPLICATIONS

- Any heat-carrying fluid (water, glycol water...)
- Any pipe
- Any flowrate range

▢ EASY INSTALLATION

The flowmeter is installed on the input or output pipe of the circuit. Input and output temperatures are measured with two Pt 100 probes that can be ordered from ULTRAFLUX.

If one of the two temperatures is fixed, its value may be entered into the converter. Then only the other temperature needs to be measured by the meter.

▢ PERFORMANCE

- Temperature range for Pt 100 :
-20°C to 210°C
- Accuracy :
 - . Temperature : 0.2°C
 - . Calorific value : 1.5% to 2% typically
- Maintenance not required
- Easy use

▢ SIMPLE DISPLAY

A large screen is associated with each function of the flowmeter.

FLOW	=	13.26 m ³ /h
P	=	364.8 kW
T1	=	59.6 °C
T2	=	83.3 °C
T1-T2	=	23.7 °C

Flowrate (Q) can be indicated in m³/s, m³/h, m³/d, l/s, l/min et l/h. The calorific value (P) is calculated and displayed in kW.

▢ FEATURES

- Ability to memorize |T1 - T2| and P in the logger of the flowmeter.
- The function is factory-calibrated.