SonoTT™ - Non-Invasive Flow Measurement System

Flow Measurement of Tubing in Extracorporeal Circulation Systems
Our non-invasive, medically approved SonoTT™ flow measurement system is based on the ultrasound transit-time principle. Sensors and flow meters are used on extracorporeal tubing systems such as heart-lung machines or extracorporeal membrane oxygenation for flow display and evaluation.

**SonoTT™ FlowComputer**

Very compact flow meter with particularly large and easy-to-read TFT display with numerous display elements. This flow meter offers numerous functions and options depending on application requirements:

- Numerical and graphical display of flow values
- Volume measurement mode
- Easy one-knob operation of all functions
- RS-232 Interface to PCs

Optional:

- Second flow channel
- Further inputs e.g. for pressure sensor, analog signal (AUX)
- Integrated printer
- Acoustic information alarm for adjustable lower and upper flow limits

**SonoTT™ FlowMeter**

Practical and compact flow meter. Well suited for reliable display of flow measurement in tubing systems.

- Easy-to-read dot-matrix LED display
- Numerical flow display
- Flow bar-graph display for flow dynamics
- Acoustic information alarm for adjustable lower and upper flow limits
- RS-232 Interface to PCs

**SonoTT™ Clamp-On Transducer**

The sensor encloses flexible tubing with its simple click closure in a media-contactless and hygienic way. It can be ideally combined with both flow meters – SonoTT™ FlowComputer and SonoTT™ FlowMeter.

- Seven different sensors for all common medical tubing sizes
- Customer-specific calibration (medium, temperature, tubing) for maximum measuring accuracy
- Up to seven calibration tables per sensor
- Excellent accuracy and stability
- Waterproof, easy to clean and disinfectable

**Technology of the Ultrasound Transit-Time Principle**

Four ultrasonic sensors (piezo ceramics) are arranged in an „X“-configuration around the flow to be measured and send high-frequency acoustic signals alternately with and against flow direction. The transit-time for every impulse is measured and the difference between the upstream and downstream measurement is proportional to the volumetric flow rate.

More detailed information can be found in our technical data sheets at [www.em-tec.de/products](http://www.em-tec.de/products)