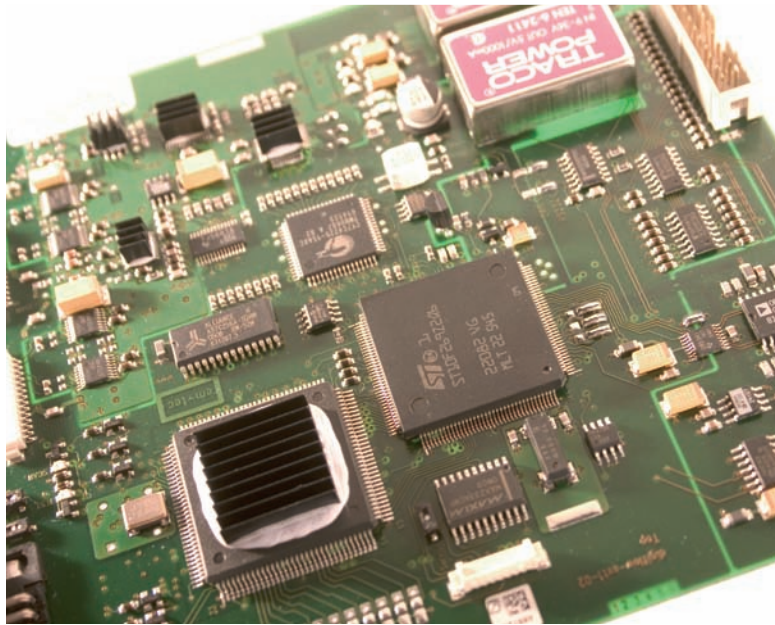


Solutions in  
Medical  
Engineering



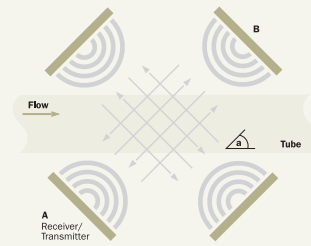
OEM Flow  
Measurement  
Board DigiFlow

..em·tec

## Transit- Time Principle

Transit-time flowmeters measure the difference in travel-time between pulses transmitted in a single path along and against the flow.

One or two piezo-ceramic transducer-pairs are used. Each transducer-pair alternately transmits and receives bursts of ultrasonic energy. The difference in the transit-times in the upstream vs. the downstream direction measured over the same path can be used to calculate the flow through the tube.



## OEM Flow Measurement Board Digiflow and Digiflow ext.

The DigiFlow transit-time flowmeter boards are highly precise and versatile OEM-parts that uses modern correlation technique to measure flow. Used with pre-calibrated flow-probes the boards offer absolute accuracy of  $\pm 7\%$  or, if optimized measurement set-up is used, up to  $\pm 3\%$ .

The DigiFlow ext. is a replacement for Transonic® OEM Boards and has same mechanical fixtures and electrical interface.

### DigiFlow

Board Size	114 x 95 mm
Power Requirements	+5V, $\pm 15V$ , ca. 7 Watts
Measurement Range	$\pm 32$ lpm
Measurement Resolution	1 mlpm
Transmitting Frequency Range	15 KHz to 18 MHz, transmitting burst is programmable
ADC Sampling Rate	36 MHz
Max. Scan Rate	1000 Hz
Bubble Detection	possible on request
Probes	Z or X type
Communication	RS 232, CAN, SPI



### DigiFlow ext.

Board Size	139,7 x 151,9 mm
Power Requirements	9 to 36 V, ca. 7 Watts
Measurement Range	$\pm 32$ lpm
Measurement Resolution	1 mlpm
Transmitting Frequency Range	15 KHz to 18 MHz, transmitting burst is programmable
ADC Sampling Rate	36 MHz
Max. Scan Rate	1000 Hz
Bubble Detection	possible on request
Probes	Z or X type
Communication	RS 232, analog



## Flow Probes

Robust Clamp-On Flow-Probes for silicon or pvc tubing. Probes are pre-calibrated for maximum accuracy. Up to 7 calibration tables can be stored in an EPROM. For custom-specific calibration please ask our technical support engineers. Probes are water-proof and easy to clean.

