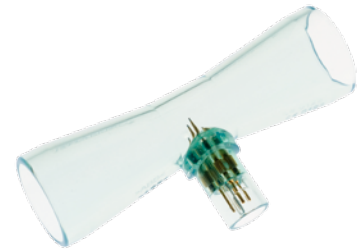


SpiroQuant-MA

OEM flow module for measurement of breathing gas flow for respiratory and anaesthesia machines with anaemometer sensor SpiroQuant A+



SpiroQuant-MA



SpiroQuant A+

Technical Data (Specifications)

Electrical Specification

Supply voltage	5 V DC $\pm 4\%$; 6-12 V DC versions on request (For 5 V version min. 4.8 V is required)Person
Current consumption	90 to 250 mA (depending on gas flow)
Working principle	Constant temperature mode
Interface	RS-232 with level converter (EIA/TIA-232 compatible) Data rate: 19200 Baud Data bit: 8 Stop bit: 1 Parity: none Handshake: none
External wire cleaning	TTL compatible H level (approx. 250 ms pulse length)
Digital I/O (optional)	TTL compatible signal, user specific level
AD conversion	Resolution: 10bit Conversion time: approx. 5 ms max. data rate: 200 samples per second

Mechanical Specification

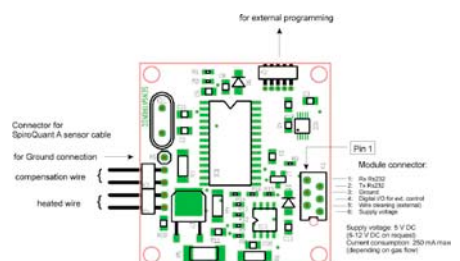
Dimensions	37 x 41 mm (L x W) Height max. 8 mm (for 5 V versions) Height max. 15 mm (for 6-12 V versions)
Weight	approx. 10 g
Mounting holes	4 x \varnothing 3.2 mm
Connectors	Board supply and communication: MicroMatch 6-pole Flow sensor: Molex 5-pole

Features

- constant temperature mode
- RS-232 communication
- 10 bit A/D converter
- auto-zero function
- wire cleaning (Flow sensor)
- in circuit programming

The OEM module SpiroQuant-MA is designed to work with hot-wire flow sensor SpiroQuant A+.

The module drives the hot-wire sensor and generates a signal proportional to the actual flow dependent power consumption of the heated wire. Using a calibration curve, this value can be converted into the actual flow value. The compensation wire in the flow sensor is thereby used to compensate the influence of the gas temperature on the measured signal.



ENVITEC-Wismar GmbH

Alter Holzhafen 18
23966 Wismar, Germany
Tel. +49-(0)-3841-360-1 • Fax. +49-(0)-3841-360-222
e-mail: info@envitec.com • www.envitec.com