

digital turbine system with RS232 interface



Mini PCB in SMD technology

Flowmeter housing

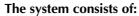


This system can be used in a wide variety of industrial, laboratory and medical device applications.

As gas flows through the sensor, a turbine blade interrupts an infrared beam generating a pulse signal with frequency directly proportional to the flow rate.

The system gives two outputs: digital 0-5V square wave pulse and RS232.

> The bidirectional optoisolated RS232 port lets you send data to and receive data from your PC or instruments.



• Mini-PCB with microprocessor controller in SMD technology, dimensions only 80x55x16 mm.

• Digital turbine flowmeter complete with sensor housing plus cable. Several different flowmeter housings are available.

Flowmeter application:

Continuous flow monitoring. Average flow monitoring.

Continuous volume monitoring.

No calibration required!

Spirometry application:

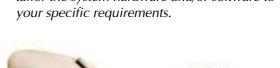
Through RS232 commands the system can carry out FVC, VC and MVV spirometry tests Calculates up to 30 inspiratory/expiratory functional parameters.

Software routines for test quality control and test interpretation (ATS).

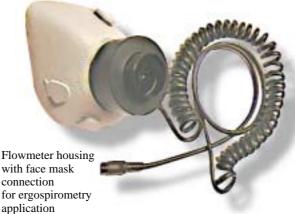
Flow/volume and volume/time curve data

The flowmeter accepts an industry-standard mouthpiece of 30mm diameter.

Note that the MIR R&D department is ready to tailor the system hardware and/or software to



Flowmeter housing with face mask connection for ergospirometry



PCB TECHNICAL SPECIFICATIONS:

Dimensions: 80x55x16 mm (with standard connectors)

Power supply:

During measurement: 5V DC@20mA

Stand by: 5V DC@3mA

MIR reserves the right to modify the technical characteristics at any time without prior notice.

Optoisolated RS232: flow, volume, spirometry data....

Digital (0-5V): Square wave pulse Internal software: 256 Kbit OTP memory

FLOWMETER TECHNICAL SPECIFICATIONS:

Internal diameter: 30mm

Accuracy: ±3% Flow range: ±16L/s Volume resolution: 20mL

Dynamic resistance: < 0.5cmH₂O/L/s

FDA Registered ISO 9001

EN 46001

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