FlowMeter F1

Precise. Compact. Lovable.

analyser
the art of measuring

The FlowMeter F1 measures gas flows, volume, absolute pressure and temperature. It is easy to use, battery powered, compact, versatile and ideal for engineering, manufacturing and field service.
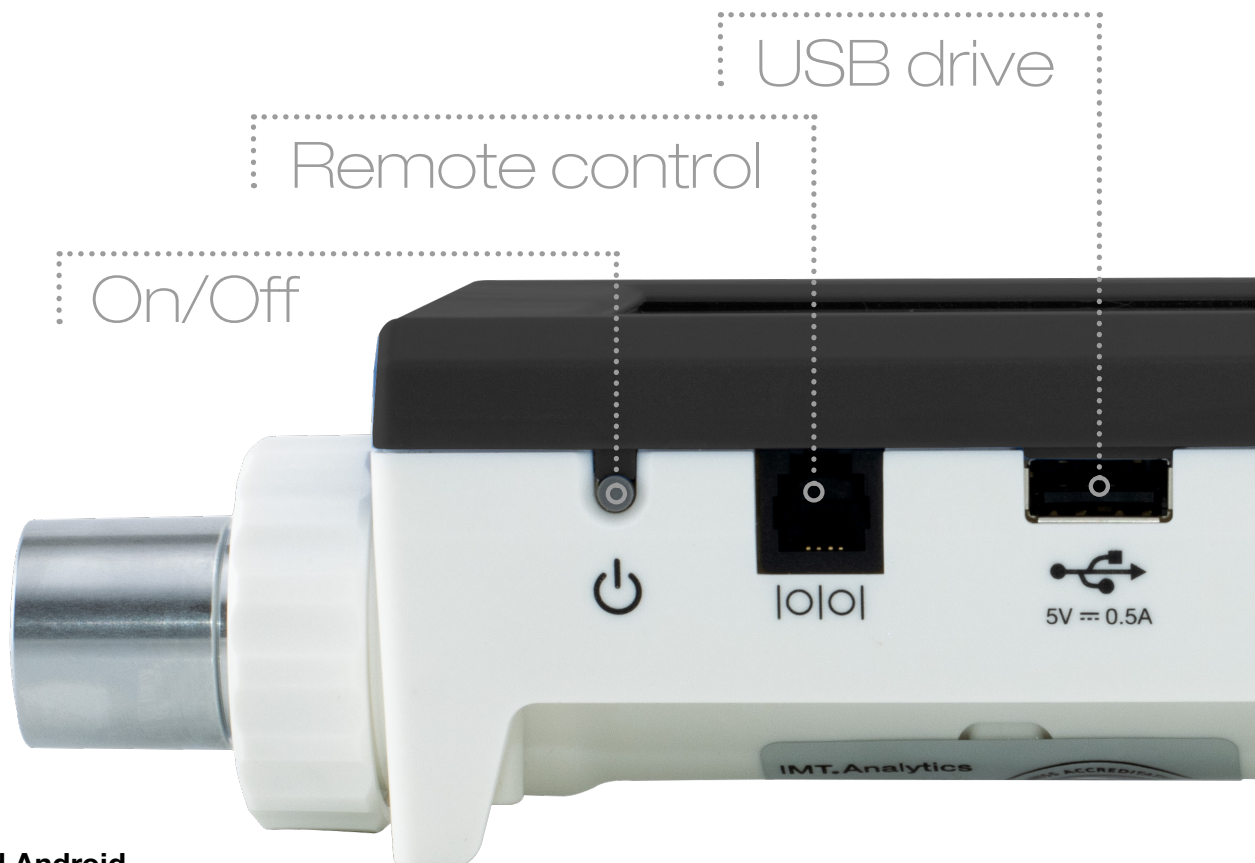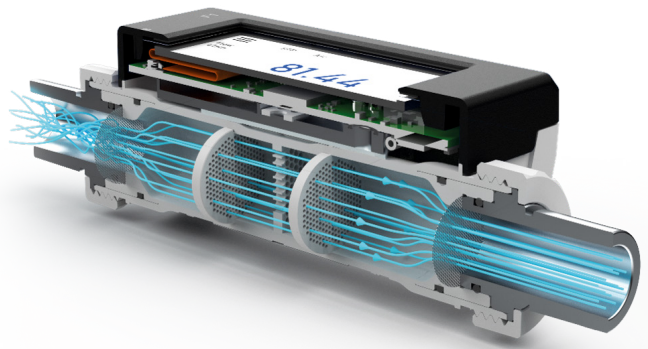
Temperature

Absolute pressure

F1

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STP   Air   ● 00:01:25   ⚹ 🔋 78%

Flow
l/min

131.42

▶

Temperature   Pabs   Volume

25.0   1283.3   501.00

°C   mbar   ml

Flow

Features

- Flow measurement with 1.9 % accuracy
- Gas temperature
- Absolute pressure
- Built-in battery

- Low resistance
- Easy to use
- Remote control interface

Precise flow measurement

The new patented flow measurement, with its multi-disc system, uses AI algorithms to ensure precise flow accuracy, a very low zero drift and low flow resistance.

swiss made

USB drive

Remote control

On/Off

App for iOS and Android

Analyse data with your mobile device. The FlowMeter App offers high resolution real-time charts, advanced data snapshot and more.

Easy to Use

The FlowMeter offers a beautiful, high resolution single-touch user interface that is configurable. View real-time charts and numerical values. Change the unit of measure, gas standard and gas type quickly and easily.

Recording and data snapshot

Record data for up to 100 hours with a resolution of 1 ms and export it as a csv file. Data snapshot is stored as a bitmap (bmp) file.

Battery powered

Use FlowMeter independently all day long. It internal rechargeable battery allows convenient, untethered measuring on the go.
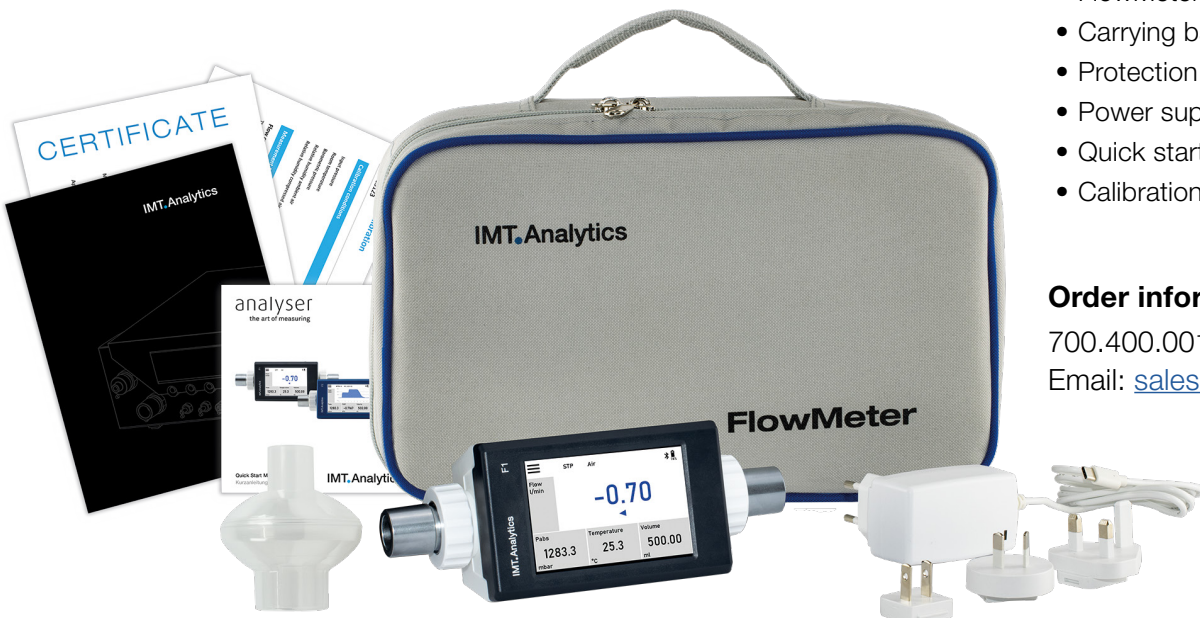
Power supply

5V ⎓ 2.5A

FlowMeter F1 test set

The FlowMeter set contains

- FlowMeter F1
- Carrying bag
- Protection Filter RT019
- Power supply
- Quick start guide
- Calibration certificate

Order information

700.400.001 FlowMeter F1 test set
Email: sales@imtanalytics.com

Technical specifications FlowMeter F1

Measurements		Range	Accuracy
Flow	Measuring direction	Bidirectional	
	Temperature compensation	Automatic	
	Pressure compensation	Automatic	
	Flow	± 300 L/min	± 1.9 % or ± 0.05 L/min
Volume	in flow channel	0–500 000 L	± 4 % or ± 1 mL
Pressure	Absolute pressure in flow channel (P_{abs})	0.5–2 bar	± 10 mbar
Temperature	in flow channel	-10–50 °C	± 1 °C

Additional information		Range	Accuracy
Gas types		Air, Air/O_2, N_2	
Gas standards		ATP, STP, BTPS-A, CTP (Channel temperature pressure)	
Units	Flow	L/min, ft³/min (cfm/min)	
	Volume	L, mL, ft³ (cfm)	
	Pressure	mbar, cmH_2O, inH_2O, hPa, kPa, Pa, mmHg, PSI	
	Temperature	°C, °F, K	
Resistance	in flow channel	<20 mbar @ 200 L/min	<40 mbar @ 300 L/min
Response Time	Flow	4 ms to 63 % of full scale	

General information	
Power supply	5 V, max 2.5 A, supplied through USB-C
Power consumption	Typical 0.5 W, max. 1 W Battery charging: up to 12.5 W
Battery operation	Typical 10 hours
Weight	350 gram
Dimensions (w × d × h)	20 × 8 × 6 cm
Data storage	USB stick
Display	High resolution touch-screen display 3.5" (480 × 320 px)
Interfaces	USB-A for USB stick, USB-C for power, RJ-10 for remote control
Calibration	Annually
Operating temperature	5–40 °C (50–104 °F)
Operating humidity	10–90 % RH non-condensing
Approvals	CE, UKCA, CSA (North America), FCC, IC, IEC 61010-1:2010/AMD1:2016, IEC 61326-1:2020

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