

CITREX H5

Mobile Gas Flow Analyser

analyser

the art of measuring

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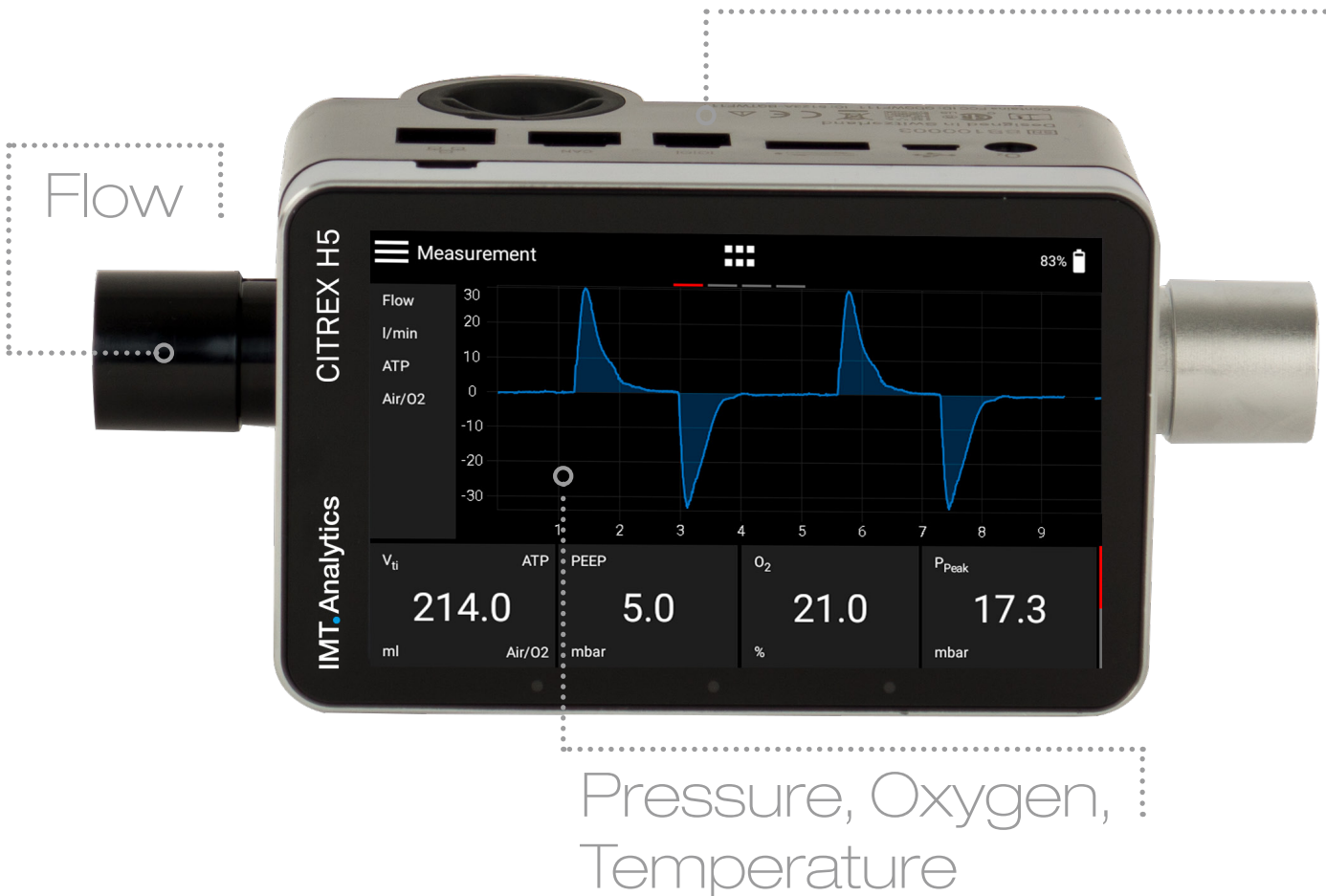


The ideal all-in-one testing device for Biomedical engineers, independent service organizations, anaesthesia device and ventilator manufacturers.

CITREX H5 is the gas flow and pressure measurement instrument with the most advanced user interface. It is portable, accurate and enables users to individually configure their measuring screens.

The CITREX H5 is designed to meet a wide variety of day-to-day applications. Its precise and highly reliable capabilities allow it to test the performance of different medical devices such as ventilators and anaesthesia machines or oxygen flow meters, pressure gauges and suction devices.

Intergrated
Test Sequences



Features

- High-resolution multi-touch display
- Intuitive graphical user interface
- Extended profile capabilities
- Flow and pressure trigger settings
- Up to 17 gas standards
- Up to 26 respiratory parameters
- On-screen data analysis
- Real-time charts
- Statistics values

Easy to Use Interface

The device measures bi-directional flows, pressures, temperatures and oxygen concentrations. The 4.3" high-resolution color touch screen displays numerical, graphical and trending data perfectly. The intuitive user interface is easily configurable, with options to save multiple profiles to suit many different applications.

FlowLab PC Tool

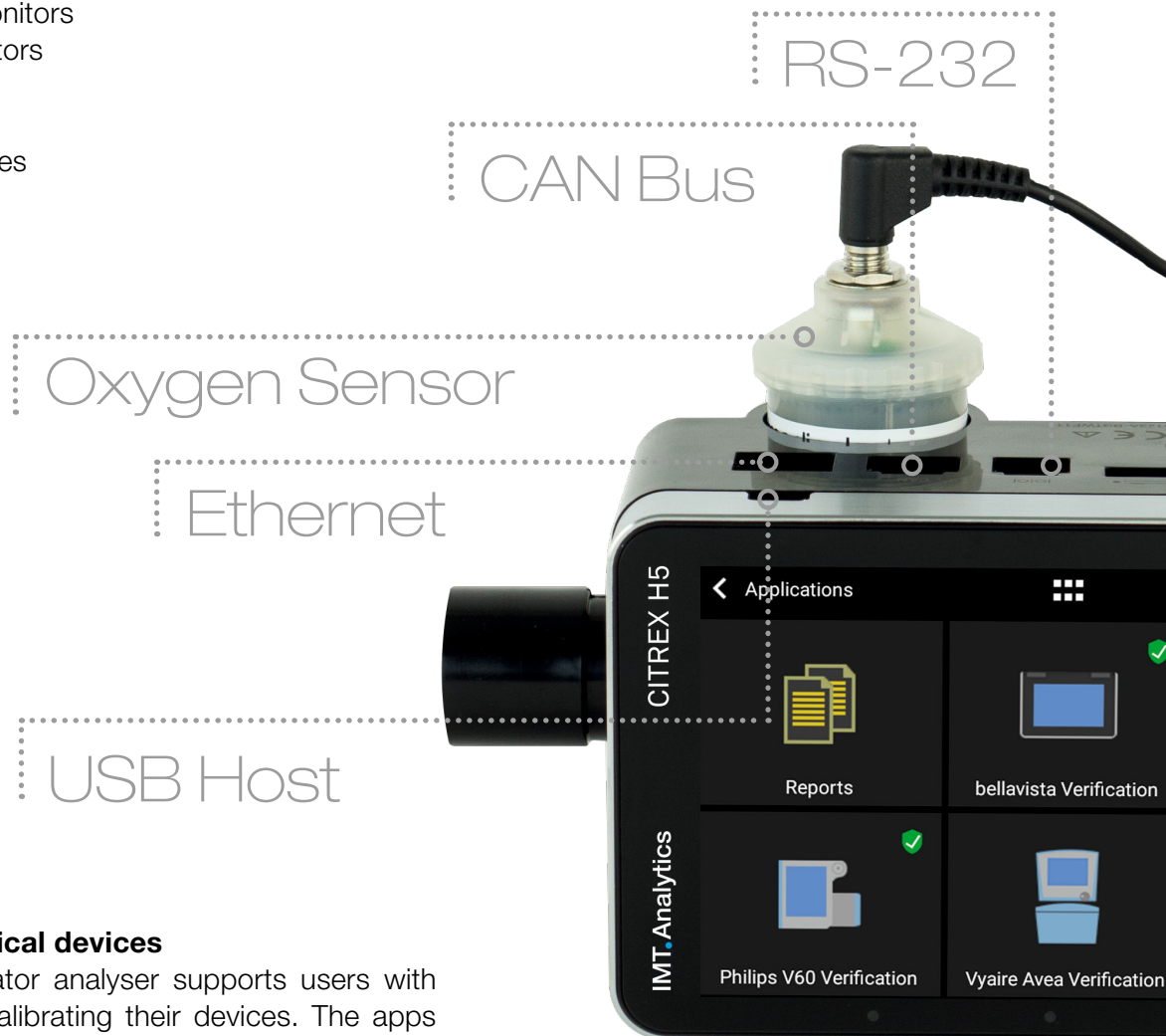
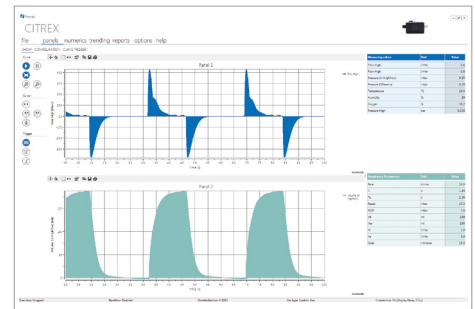
High-resolution real-time curves, trending and advanced logging capabilities makes FlowLab indispensable for research. Detailed customized reports can be produced, saved and printed.

CITREX H5 for inspecting and certifying:

- CPAP/bi-level ventilators
- ICU ventilators
- High-frequency ventilators
- Blood pressure monitors
- Oxygen concentrators
- Spirometers
- CO₂ insufflators
- Medical gas supplies



Measurement			
P _{Mean} 6.0 mbar	PF _{Insp} 30.1 l/min	ATP 214.0 ml	ATP PEEP 5.0 mbar
Rate 14.0 l/min	Ti/Tcyc 33.3 %	ATP 1.70 s	P _{Peak} 17.3 mbar
P _{Atmo} 962 hPa	Temp. 26.3 °C	+	



Apps for testing medical devices

The CITREX H5 ventilator analyser supports users with apps for testing and calibrating their devices. The apps enable safe and fast testing. Entire test sequences are displayed with images and text, and values are measured automatically. The test results are recorded in a PDF report that can be signed directly on the screen.

CITREX H5 test set contains:

- CITREX H5
- SmartLung Adult (1L)
- FlowLab software
- Oxygen sensor
- Adapter set
- Laminar flow tube
- Car adapter
- Micro SD memory card
- Protection filter
- USB cable
- Ethernet cable
- Power supply
- Carrying bag
- USB adapter
- Quick start manual
- CITREX H5 Protector



Order number: 304.555.000
Email: sales@imtanalytics.com

Analog Out

USB Port



MultiGasAnalyser OR-703

Smallest multi-gas sensor in the world.

CITREX H5, in combination with the MultiGasAnalyser, offers the best and easiest solution for testing anesthesia devices. The MultiGasAnalyser OR-703, paired with the CITREX H5, can measure CO₂, N₂O, Halothane, Enflurane, Isoflurane, Sevoflurane and Desflurane.



Technical Specification CITREX H5

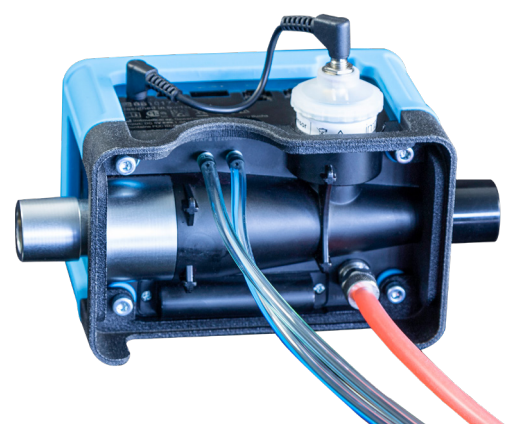
Flow and pressure measurements		Range	Accuracy
Flow	Measuring direction	Bidirectional	
	Temperature compensated	Automatic	
	Pressure compensated	Automatic	
	Humidity compensated	Manually	
Pressure	High Flow	± 300 L/min	± 1.9% * or ± 0.1 L/min (for 10..40°C)**
	High Pressure (P _{High})	-1 – 10 bar	±1% * or ±7mbar**
	Differential Pressure (P _{Dif})	± 200 mbar	± 0.75% * or ± 0.1 mbar **
	Pressure in High Flow Channel (P _{Channel})	-50 – 150 mbar	± 0.75% * or ± 0.1 mbar **
Units	Atmospheric Pressure (P _{Atmo})	500 – 1150 mbar	± 1% * or ± 5 mbar**
	Flow	L/min, L/s, cfm, mL/min, mL/s	
	Pressure	bar, mbar, cmH ₂ O, inH ₂ O, Torr, inHg, hPa, kPa, mmHg, PSI	
Other measurements		Range	Accuracy
Oxygen	Concentration	0 – 100 %	± 1 % O ₂ **
	Pressure compensated	≤ 150 mbar	
Temperature	In High Flow Channel	0 – 50 °C	± 1.75% * or ± 0.5 °C**
CO ₂	Concentration (with optional OR-703)	0 – 15 vol%	± (0.2 vol% + 2 % of reading)
		15 – 25 vol%	unspecified
N ₂ O	Concentration (with optional OR-703)	0 – 100 vol%	± (2 % vol% + 2 % of reading)
HAL, ISO, ENF	Concentration (with optional OR-703)	0 – 8 vol%	± (0.15 vol% + 5 % of reading)
		8 – 25 vol%	unspecified
SEV	Concentration (with optional OR-703)	0 – 10 vol%	± (0.15 vol% + 5 % of reading)
		10 – 25 vol%	unspecified
DES	Concentration (with optional OR-703)	0 – 22 vol%	± (0.15 vol% + 5 % of reading)
		22 – 25 vol%	unspecified
Gas types		Air, O ₂ , Air/O ₂ , N ₂ O, N ₂ O/O ₂ , He/O ₂ , N ₂ , CO ₂	
Gas standards		ATP, ATPD, ATPS, AP21, STP, STPH, BTPS, BTPS-A, BTPD, BTPD-A, 0/1013, 20/981, 15/1013, 25/991, 20/1013, NTPD, NTPS	
Ventilation parameters		Range	Accuracy
Breath rate	Rate	1 – 1000 bpm	± 1 bpm * or ± 2.5 % **
Time	T _i , T _e	0.05 – 60 s	± 0.02 s
Ratio	I:E	1:300 – 300:1	± 2.5 % *
	T _i /T _{cyt}	0 – 100 %	± 5 % *
Breath volumes	V		± 2% * or ± 0.20 mL (> 6 sL/min)**
	V _{ti} , V _{te}	± 10 L	± 2% * or ± 0.20 mL (> 6 sL/min)**
Minute volume	V _i , V _e	0 – 300 sL/min	± 2.5 % *
Pressure	P _{Peak} , P _{Mean} , PEEP, P _{Plateau} , IPAP	0 – 150 mbar	± 0.75 % * or ± 0.1 mbar **
Peakflow	PF _{Insp} , PF _{Exp}	± 300 sL/min	± 1.9% * or ± 0.1 sL/min **
Compliance	C _{Stat}	0 – 1000 mL/mbar	± 3% * or ± 1 mL/mbar **
Trigger	Adult, Pediatric, HFO, ext. Trigger	Adult, Pediatric, HFO; Adjustable on flow or pressure curves with user-defined limits.	
General information			
Power		100 – 240 VAC, 50/60 Hz	
Battery		5 hours	
Power consumption		2.5 – 6 W	
Weight		0.52 kg	
Dimensions (w × d × h)		11.4 × 7 × 7.3 cm	
Data storage		Internal and microSD Card	
Display		4.3" Multi-Touch (color), Realtime curves	
Interfaces		RS-232, USB, Ethernet, CAN, Analog Out, TTL, WLAN, TSI4000 and Prima Protocol	
Calibration		Annually	
Conditions Ambient temperature		15 – 40 °C (59 – 104 °F)	
Conditions Humidity		10 – 90 % R.H.***	
Approvals		CE, BC (Energy Efficiency for Battery Charging Systems), CSA (North America), IEC 61010-1:2010, IEC 61326-2:2012	

The greater tolerance is valid:

* Tolerance related to the measured value

** Absolute tolerance

*** The unit sL/min is based on ambient conditions of 0 °C and 1013.25 mbar (DIN 1343).



IMT Analytics

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