



LAMBDA MASSFLOW *touch*

PROGRAMMABLE GAS FLOW REGULATORS

Precise Gas Flow Control with Intuitive Touchscreen Interface

Smart Gas Flow Control

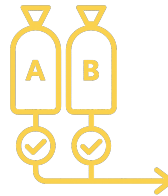
The LAMBDA MASSFLOW *touch* is a **programmable digital gas flow controller** designed for **stand-alone use** or seamless integration with the **LAMBDA Minifor2Bio *touch*** laboratory bioreactor. A **laminar mass flow sensor** ensures precise measurement with minimal pressure drop. The gas flow is regulated by LAMBDA's proprietary, **microprocessor-controlled proportional needle valve**.

Precise Gas Flow Regulation



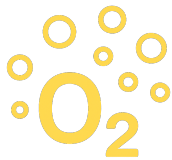
The MASSFLOW *touch* ensures **accurate gas flow measurement** that remains largely independent of **pressure and temperature variations**.

Automatic Gas Mixing



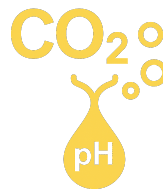
Combine **several MASSFLOW *touch* units to mix gases such as N₂, Air, O₂, and CO₂** with precision - ideal for creating defined gas compositions or adjusting specific concentrations.

O₂-Enrichment



Boost oxygen supply for **high-density bacterial and yeast cultures**. The MASSFLOW *touch* provides **controlled O₂ addition** exactly when and where it's needed.

Automatic pH Regulation



Keep culture pH within the optimal range effortlessly. The MASSFLOW *touch* **precisely doses CO₂ in real time** to control acidity.

MASSFLOW *touch* – Smart, precise gas regulation for every lab!

Compact & User-Friendly

Compact design: 10 x 10 x 21 cm, stackable

Touchscreen interface: 3.5" TFT IPS display for intuitive operation and real-time monitoring

Advanced connectivity: USB for remote control, dosing program management, and software updates

Flow Rate Ranges

MASSFLOW 500: 0 - 500 ml/min

MASSFLOW 5000: 0 - 5 l/min

Gases: Air, N₂, O₂, CO₂, Argon

Gas Mixing Configuration

Flexible configuration for **precise control and mixing of several gas streams**, e.g. air, O₂, CO₂, N₂, etc.:

- **4-Gas Mix:** mammalian or stem cell cultures with constant gas flow
- **3-Gas Mix:** anaerobic fermentation and pH control with CO₂
- **2-Gas Mix:** O₂-enrichment and pO₂ regulation

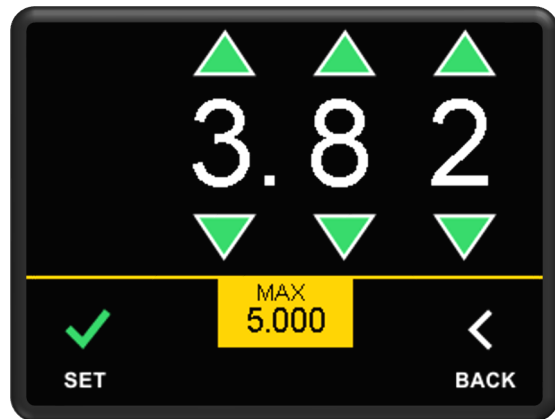
LAMBDA Device Manager

Free software tool for easy firmware updates and basic PC control

Advanced Features for Precision and Efficiency

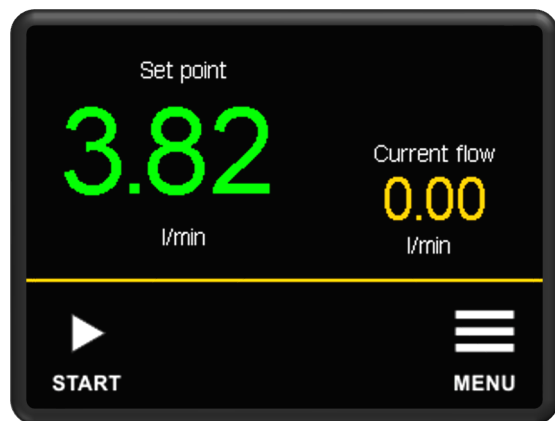
FLOW RATE SETTING

Select desired gas flow rate directly on the touchscreen



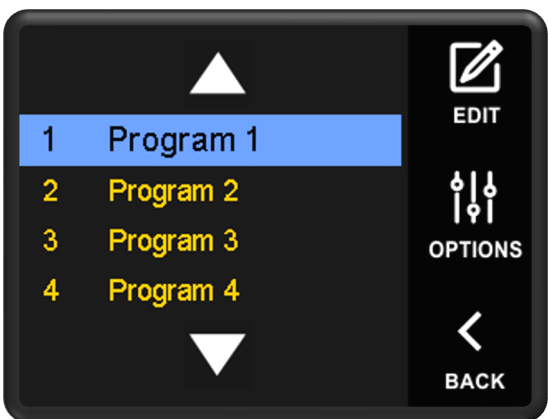
FLOW RATE DISPLAY

Monitor preset and actual gas flow values in real time



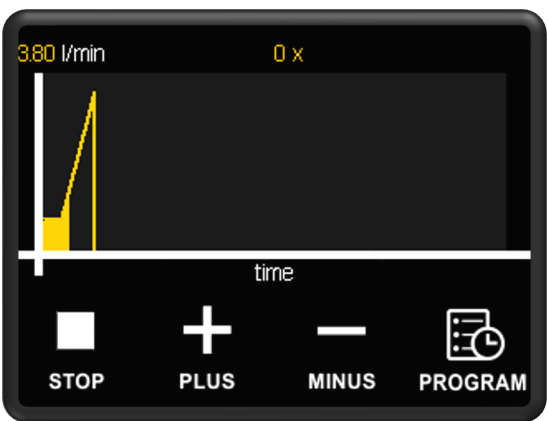
GAS DOSING PROGRAMS

Create and manage programs on the device or via software



REAL-TIME VISUALISATION

Overview screen shows gas flow rate, status and more



Technical Specifications

	MASSFLOW <i>touch</i> 500	MASSFLOW <i>touch</i> 5000
Type	microprocessor-controlled, programmable gas flow regulator	
Flow rate	0.000–0.500 l/min	0.000–5.000 l/min
Accuracy	± (1.5% + 0.0025 l/min)	± (1.5% + 0.010 l/min)
Flow steps	with step 0.1, 0.01, 0.001 (adjustable)	
Internal memory	up to 10 programs (each 100 segments)	
Operating pressure	Min. 0.5 bar, Max. 2 bar	
Sensor factory calibration	Air (CO ₂ – optional)	
Maximum flow rate	0.55 l/min	5.5 l/min
Sensor pressure drop	< 30 Pa	< 100 Pa
Sensor maximum overflow	10 l/min	200 l/min
Sensor maximum flow change	1.5 l/sec	30 l/sec
Regulation	proportional needle valve controlled by microprocessor	
Interface	USB 1.1/2.0 & REMOTE (CAN BUS)	
Display	3.5" TFT IPS display with 320 x 240 pixels resolution; viewing angles ± 70°	
Conformity	DIRECTIVE 2014/35/EU, DIRECTIVE 2014/30/EU	
Technical Standards	EN 61000-6-1, EN-61000-6-4, EN 61010-1:2010/A1:2019/AC:2019-04, EN 61326-1:2013	
Dimensions (W x H x D)	105 mm x 95 mm x 210 mm	
Weight	0.8 kg	
Operating temperature	0-40 °C	
Operating humidity	0-90%, not condensing	
Power supply	Plug-in power adapter 90–240V AC 50/60 Hz 12V / 2.5A 30W barrel jack 5.5/2.1mm	

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