



# TRI-GAS-MIXER-1.5L and TRI-GAS-MIXER-15L

Technical Datasheet



## Technical Data

	TRI-GAS-MIXER-1.5L	TRI-GAS-MIXER-15L
Output maximum flowrate	1.5 L/min	15 L/min
Output pressure	0-2 barg (0-30 psig)	
CO2 mixing range	0-10%	
O2 mixing range	0-10 %	
Max input pressure - control unit	5 barg	
Display	4.3" TFT display with a capacitive touchscreen	

## CO2-O2-MODULE

CO2 sensor	Non-Dispersive InfraRed (NDIR) detector	
CO2 accuracy	±0.1 %*	
O2 sensor	Fluorescence-based Optical Oxygen Sensor	
O2 accuracy	±0.1 %*	
CO2-O2-MODULE lifetime	5 years	

\*Typical reference conditions are 25°C and 1013 mbar

## Dimensions

	TRI-GAS-MIXER-1.5L	TRI-GAS-MIXER-15L
Tri-Gas Mixer control unit	270x140x325 mm	
Tri-Gas Mixer control unit weight	7.8 kg	
Mixing tank	240x427x240 mm	450x660x450 mm
Mixing tank volume	5 L	40 L
Air compressor <sup>3</sup>	180x520x470 mm	400x400x550 mm

## Control unit rear panel

1 Input Gas	Push to fit connector <sup>1</sup>
2 Purge	Push to fit connector <sup>1</sup>
3 From/To tank	Push to fit connector <sup>1</sup>
4 Gas Output	Stainless steel 1/4" compression tube fittings – male connector
5 Sampling Port	Barb connector for 6 mm OD soft tubes
6 Analog Output 0-10 V or 0/4-20 mA	4 Poles Mini DIN female connector, to connect the Analog Output cable
7 Alarm contact closure	Screw terminal
8 LAN port	RJ-45 port
9 USB port	USB type-A-port to connect: - WIFI Dongle USB key <sup>2</sup> - USB key for Data Download

## Gas Input Minimum Pressure Requirements [barg]

	Output pressure ≤ 1	Output pressure > 1
CO2, N2, Air	2.4	Output pressure + 1.4
Premixed backup	1.2	Output pressure + 0.2
Calibration gas	2.0	

## Pressure Gauges

Max input pressure	10 barg
Min outlet pressure	0 barg
Max outlet pressure	4 barg
Input connectors	Push to fit connector <sup>1</sup>
Output connectors	Push to fit connector <sup>1</sup>
Wall fixing screws	#2 M4 screws
Mounting position	In any position

## Power supply

Tri-Gas Mixer supply voltage	24 VDC
Power consumption	60W

## Environmental Conditions

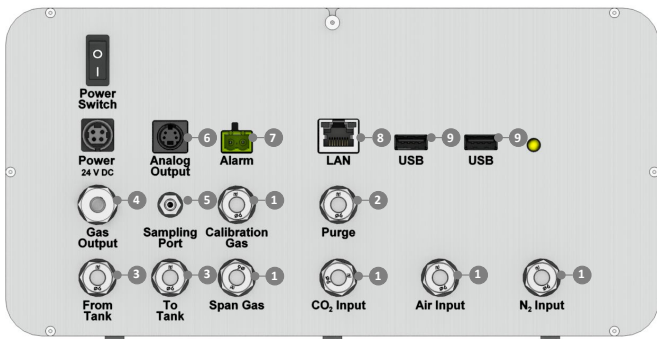
Temperature range	5°C - 40°C
Relative Humidity	0 – 95%
Barometric Pressure	800 – 1200 mbar
IP rating – control unit	IP30

## Components

Component	Included	Optional
1 Tri-Gas Mixer control unit	●	●
2 Mixing tank	●	●
3 Mixing tank support	●	●
4 Pressure gauges, #5	●	●
5 Analog Output cable	●	●
6 Power supply	●	●
7 Air compressor	●	●
8 Bottle for water condensate, included with Air compressor	●	●
9 Power supply, included with Air compressor	●	●
10 VOC filter	●	●
11 VOC filter panel	●	●

## Gas tubing

Component	Material
12 Gas Input tubing	Polyurethane
13 Mixing tank tubing	Teflon, with stainless steel valve
14 Gas Output tubing	Polyurethane, 1/4" OD, with Stainless steel 1/4" compression tube fittings – male connector



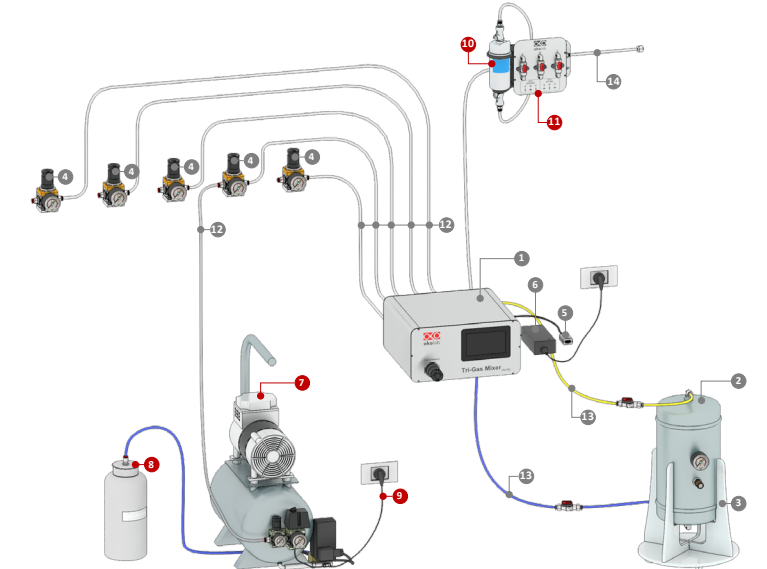
a. Tri-Gas Mixer control unit rear panel

## Analog Output Cable

Input connector	4 Poles Mini DIN male connector
Output connector	Screw terminal, to connect an external logger

<sup>1</sup> Tubes and connectors are 6 mm OD in Countries using metric system, 1/4 inch in the US and Countries using imperial system.

<sup>2</sup> Not supplied by Okolab.



b. Tri-Gas Mixer components

## Contacts:

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