

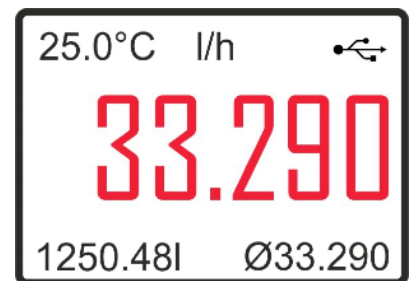
Board Computer AIC BC 3329



- display, calculate and log easily your instantaneous fuel consumption data, cumulative
- measured values as well as speed/ distance and lap routine
- On-board vehicle and large LCD display with a top intuitive handling
- Driven by user experience

The Board Computer AIC BC 3329 is the new 4 screen LCD digital display for all AIC sensors. This features the following display possibilities:

- **0.5% accuracy in combination with a NEMO sensor**
- **New with two NPN signal output modules for an easy DAQ integration**
- View instantaneous fuel consumption
- Fuel consumption accumulation
- Travel time
- Lap routine for later calculations of the individual lap characteristic
- Travel speed average, if speed sensor is connected
- Distance and lap travelled
- Making a logging is as easy as ABC
- Readings in metric or imperial units
- Easy control with start, stop logs and reset functions
- Settings are stored and will not be lost in the event of power failure
- Multiple power supplies 20-28 VAC/DC, 9-12 VDC or and optional 253VAC/DC
- Languages: English, German, French, Spanish and Portuguese



Two separate counters are permanently displaying and recording data for each of the selected value, such as fuel cumulative, distance cumulative and travel time.

These data and as well as others are collected in metric or in imperial units and continuously recorded onto your USB memory stick if connected and activated.

No additional software package is required, as you can import the CSV file directly to your spreadsheet and the data can be further processed.

Applications:

- R&D testing: vehicle fuel consumption monitoring for medium and large trucks, buses, construction, demolition and agriculture machines, mining, vans, passenger cars
- Press rides
- Diesel electrical generator
- Fleet management applications

Features and benefits:

- Together with the fuel measuring sensor you are reaching the highest accuracy for monitoring your vehicle consumption either for testing, billing application or fleet management.
- CSV data easily retrievable via a FAT 32 formatted quality USB key stick
- Robust housing for shock protection

Operating

Press **ESC** to exit the menu

Press **F1** maximum 1 second to reset consumption counter only

Press **F1** minimum 5 second to reset all counters

Press **F2** to set a lap count (must be activated in the menu in advance)

LOG start and stop logging (hold for at least 1 second)



Press **ENT** for 1 sec to enter menu and to confirm selections

Press **+/-** to navigate in the menu and toggle further views

USB A interface for the memory stick

As you have seen the BC 3329 has two functions keys with F1 & F2, so if you would have a special request we are open to enhance the functionality to your needs.

Enhanced accuracy with 5 point calibration

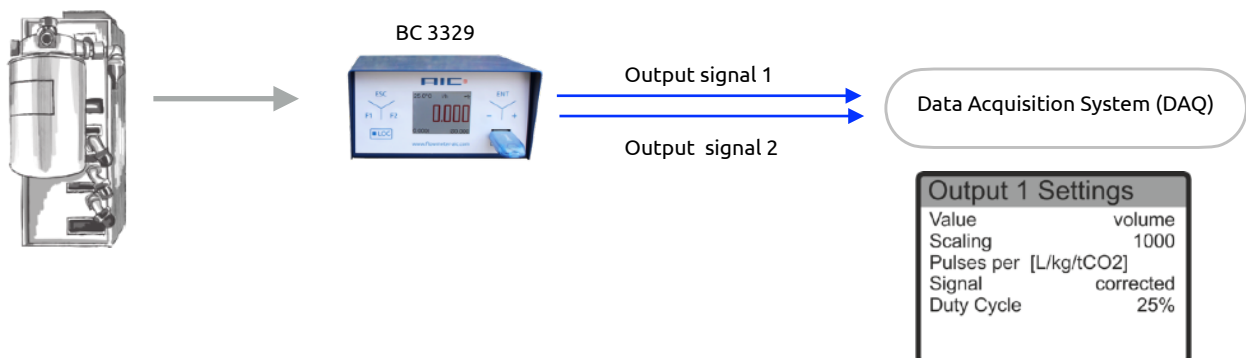
For demanding measurement applications with the AIC flow meter and the need for an 0.5% accuracy level of the measuring system the 5 point calibration is required. The 5 point calibration is performed by AIC Systems and a calibration certificate is issued.

Measure Settings	
PPL Settings	
PPkm	1000
LAP	On
Density [kg/m3]	600.0
CO2 [kg/l]	2.650
ODO [km]	240950.1

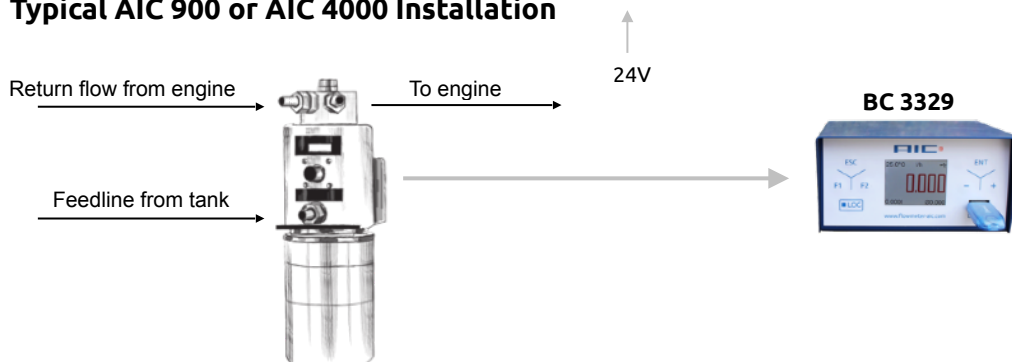
PPL Settings	
Nominal	804
Point 1	
Point 2	
Point 3	
Point 4	
Point 5	

Point 1	
Flow [l/h]	10
PPL	799

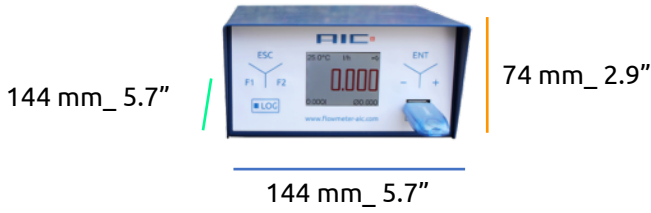
Typical AIC 7000 Installation



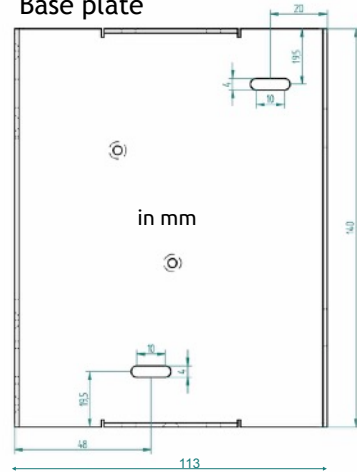
Typical AIC 900 or AIC 4000 Installation



Mounting on a small footprint



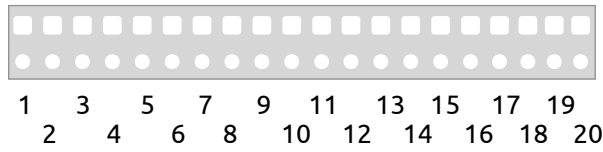
Base plate



Connection plan

AIC	
BC 3329	
S/N: 00100	
Inputs:	Outputs:
Flow (NPN)	Out 1/2
Speed (PNP)	(NPN)
Temp [Pt1000]	
1: V+	11: PTC+S
2: V-	12: PF+
3: PE	13: PF-
4: Speed+	14: RS-A
5: +20V	15: RS-B
6: PE	16: RS-G
7: Flow	17: Out 1+
8: GND	18: Out 1-
9: PTC+	19: Out 2+
10: PTC-	20: Out 2-

Terminal block



Example of the CSV log file, no third party conversion software required, just import into your spread sheet or data base application. LOG file on a PC screen:

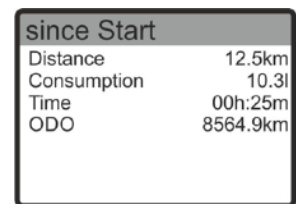
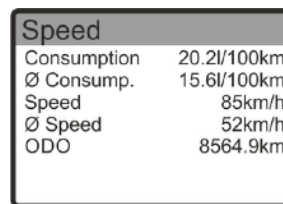
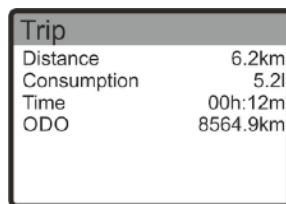
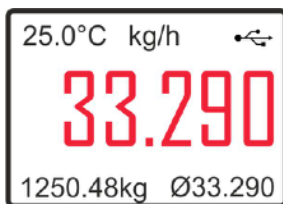
Device and settings info

Data array

Type:	BC3329										
Ser.#:	131										
FW Ver:	9.5										
PPL:	2000										
PPkm:	175										
Date:	Time:	current Consumption:	Temperature:	total Consumption:	Ø Consumption:	Speed:	Ø Speed:	ODO:			
22.5.19	07:57:09	149.6 l/h	40.5 °C	25033.7 l	148.6 l/h	2 km/h	1.7 km/h	11234 km			
22.5.19	07:57:11	149.2 l/h	40.6 °C	25033.7 l	148.6 l/h	2 km/h	1.7 km/h	11234 km			
22.5.19	07:57:13	148 l/h	40.6 °C	25033.8 l	148.6 l/h	3 km/h	1.7 km/h	11234 km			
22.5.19	07:57:15	148.5 l/h	40.5 °C	25033.9 l	148.6 l/h	4 km/h	1.7 km/h	11234 km			
22.5.19	07:57:17	148 l/h	40.5 °C	25034 l	148.6 l/h	6 km/h	1.7 km/h	11234 km			
22.5.19	07:57:19	149.1 l/h	40.5 °C	25034.1 l	148.6 l/h	8 km/h	1.7 km/h	11234 km			
22.5.19	07:57:21	147.9 l/h	40.5 °C	25034.2 l	148.6 l/h	10 km/h	1.7 km/h	11234 km			
22.5.19	07:57:23	145.9 l/h	40.5 °C	25034.2 l	148.6 l/h	12 km/h	1.7 km/h	11234 km			
22.5.19	07:57:27	145.9 l/h	40.5 °C	25034.3 l	148.6 l/h	10 km/h	1.7 km/h	11234 km			
22.5.19	07:57:29	149.9 l/h	40.5 °C	25034.5 l	148.6 l/h	10 km/h	1.7 km/h	11234 km			
22.5.19	07:57:31	147.6 l/h	40.5 °C	25034.6 l	148.6 l/h	10 km/h	1.7 km/h	11234 km			
22.5.19	07:57:33	150.2 l/h	40.3 °C	25034.7 l	148.6 l/h	10 km/h	1.7 km/h	11234 km			
22.5.19	07:57:35	149.5 l/h	40.3 °C	25034.7 l	148.6 l/h	10 km/h	1.7 km/h	11234 km			
22.5.19	07:57:37	147.6 l/h	40.4 °C	25034.8 l	148.6 l/h	10 km/h	1.7 km/h	11234 km			
22.5.19	07:57:39	146.6 l/h	40.4 °C	25034.9 l	148.6 l/h	10 km/h	1.7 km/h	11234 km			
22.5.19	07:57:41	148 l/h	40.4 °C	25035 l	148.6 l/h	10 km/h	1.7 km/h	11234 km			
22.5.19	07:57:43	145.2 l/h	40.4 °C	25035.1 l	148.6 l/h	10 km/h	1.7 km/h	11234 km			

Technical data
Board Computer BC 3329

Manufacturer	AIC Systems Inc	
Dimension	140 x 113 x 58 mm / 5.5" x 4.45" x 2.3"	
Display	LCD (UV resistant), 4 screens lines, various characters,	
Keyboard	Micro-switch push-button (UV-resistant keypad)	
Working temperature range	-5°C to +80°C (23 to 176° F)	
Housing thickness	1.5 mm coated aluminum	
IP	32	
Maximum humidity	95%, non-condensing	
Certification	EMC certified according to EN 52121-3-2:2006	
Supply voltage	9 - 12 VDC 20 - 28 VAC/DC Optional 20 - 253 VAC/DC	
Power supply load for BC only::	4.5W to 7.0W at 230VAC / 0.4 A at 24V	
Distance speed pulse input	PNP open collector	
Possible range	ppKm	100 - 30'000
Input tension	U low	< 0.5 V
	U high	> 3.5 V
Input current		< 1 mA
Frequency	f max.	> 2.5 kHz (max. speed displayed 299.9 km/h)
Fuel pulse input	NPN open collector	
Possible range	ppl	10 - 30'000
Input tension	U low	< 1.5 V
	U high	> 3.5 V
Input current		Approx. 2 mA
Frequency (50% duty cycle)	f max.	< 1 kHz
Languages	English, German, French, Spanish, Portuguese	
CE-conformity	Fulfilled	
Mounting terminals	Plug-in screw terminals	
Weight	About 220g	
Warranty	1 year	



NEW available features:

- ✔ Two NPN OUTputs for configurable, scalable and correctable output signals for an easy DAQ integration. So you can configure your output (volume flow, mass flow , CO2 or temp), scalable (e.g. 3785 pulses = gal) and reconditioned (we make use of the 5 point calibration results) to reach the highest possible accuracy.

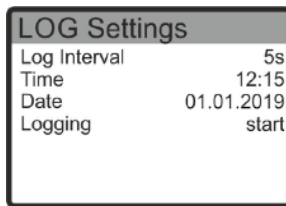
- ✔ Press Ride application with a palm button for a fully automated and documented trip of your measuring points during the ride and all logged values are saved for a later analysis and a further data evaluation on your USB stick in CSV format.

NEMO option:

- 0.5% accuracy of full scale reading
- Improved fluid management implemented
- Instantaneous mass flow indication in kg or lbs
- Indicating the real time CO₂ exhaustion

For the temperature compensation the measuring cell is upgraded with an PT 1000 high sensitive temperature probe.

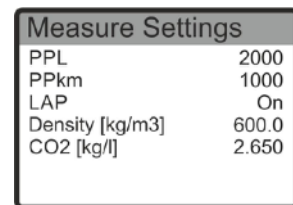
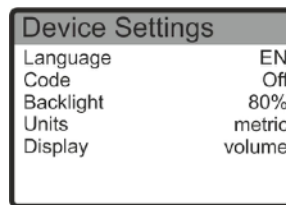
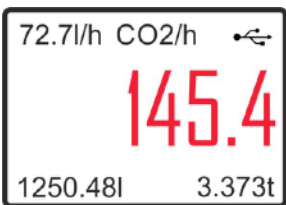
The masse calculation is based upon the manual density input (according to DIN 51757 regulation).



All data are available in the log file



Time	Current Consumption	Temperature	Total Consumption	CO ₂ Consumption	Speed	CO ₂
00:00	124.4 [m]	40.3 [C]	19203.7 [l]	142.4 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:01	162.2 [m]	40.3 [C]	20023.7 [l]	142.8 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:02	168.0 [m]	40.3 [C]	20843.7 [l]	143.2 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:03	124.8 [m]	40.3 [C]	19623.7 [l]	142.4 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:04	148.0 [m]	40.3 [C]	20243.7 [l]	142.8 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:05	148.0 [m]	40.3 [C]	20863.7 [l]	143.2 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:06	148.0 [m]	40.3 [C]	21683.7 [l]	143.6 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:07	148.0 [m]	40.3 [C]	22503.7 [l]	144.0 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:08	148.0 [m]	40.3 [C]	23323.7 [l]	144.4 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:09	148.0 [m]	40.3 [C]	24143.7 [l]	144.8 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:10	148.0 [m]	40.3 [C]	24963.7 [l]	145.2 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:11	148.0 [m]	40.3 [C]	25783.7 [l]	145.6 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:12	148.0 [m]	40.3 [C]	26603.7 [l]	146.0 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:13	148.0 [m]	40.3 [C]	27423.7 [l]	146.4 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:14	148.0 [m]	40.3 [C]	28243.7 [l]	146.8 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:15	148.0 [m]	40.3 [C]	29063.7 [l]	147.2 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:16	148.0 [m]	40.3 [C]	29883.7 [l]	147.6 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:17	148.0 [m]	40.3 [C]	30703.7 [l]	148.0 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:18	148.0 [m]	40.3 [C]	31523.7 [l]	148.4 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:19	148.0 [m]	40.3 [C]	32343.7 [l]	148.8 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:20	148.0 [m]	40.3 [C]	33163.7 [l]	149.2 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:21	148.0 [m]	40.3 [C]	33983.7 [l]	149.6 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:22	148.0 [m]	40.3 [C]	34803.7 [l]	150.0 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:23	148.0 [m]	40.3 [C]	35623.7 [l]	150.4 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:24	148.0 [m]	40.3 [C]	36443.7 [l]	150.8 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:25	148.0 [m]	40.3 [C]	37263.7 [l]	151.2 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:26	148.0 [m]	40.3 [C]	38083.7 [l]	151.6 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:27	148.0 [m]	40.3 [C]	38903.7 [l]	152.0 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:28	148.0 [m]	40.3 [C]	39723.7 [l]	152.4 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:29	148.0 [m]	40.3 [C]	40543.7 [l]	152.8 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:30	148.0 [m]	40.3 [C]	41363.7 [l]	153.2 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:31	148.0 [m]	40.3 [C]	42183.7 [l]	153.6 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:32	148.0 [m]	40.3 [C]	43003.7 [l]	154.0 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:33	148.0 [m]	40.3 [C]	43823.7 [l]	154.4 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:34	148.0 [m]	40.3 [C]	44643.7 [l]	154.8 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:35	148.0 [m]	40.3 [C]	45463.7 [l]	155.2 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:36	148.0 [m]	40.3 [C]	46283.7 [l]	155.6 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:37	148.0 [m]	40.3 [C]	47103.7 [l]	156.0 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:38	148.0 [m]	40.3 [C]	47923.7 [l]	156.4 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:39	148.0 [m]	40.3 [C]	48743.7 [l]	156.8 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:40	148.0 [m]	40.3 [C]	49563.7 [l]	157.2 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:41	148.0 [m]	40.3 [C]	50383.7 [l]	157.6 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:42	148.0 [m]	40.3 [C]	51203.7 [l]	158.0 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:43	148.0 [m]	40.3 [C]	52023.7 [l]	158.4 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:44	148.0 [m]	40.3 [C]	52843.7 [l]	158.8 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:45	148.0 [m]	40.3 [C]	53663.7 [l]	159.2 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:46	148.0 [m]	40.3 [C]	54483.7 [l]	159.6 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:47	148.0 [m]	40.3 [C]	55303.7 [l]	160.0 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:48	148.0 [m]	40.3 [C]	56123.7 [l]	160.4 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:49	148.0 [m]	40.3 [C]	56943.7 [l]	160.8 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:50	148.0 [m]	40.3 [C]	57763.7 [l]	161.2 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:51	148.0 [m]	40.3 [C]	58583.7 [l]	161.6 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:52	148.0 [m]	40.3 [C]	59403.7 [l]	162.0 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:53	148.0 [m]	40.3 [C]	60223.7 [l]	162.4 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:54	148.0 [m]	40.3 [C]	61043.7 [l]	162.8 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:55	148.0 [m]	40.3 [C]	61863.7 [l]	163.2 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:56	148.0 [m]	40.3 [C]	62683.7 [l]	163.6 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:57	148.0 [m]	40.3 [C]	63503.7 [l]	164.0 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:58	148.0 [m]	40.3 [C]	64323.7 [l]	164.4 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
00:59	148.0 [m]	40.3 [C]	65143.7 [l]	164.8 [m]	2.0 km/h	1.2 t/m ³ 11054 kg
01:00	148.0 [m]	40.3 [C]	65963.7 [l]	165.2 [m]	2.0 km/h	1.2 t/m ³ 11054 kg



Selection Guide

Board Computer BC 3329

- Two NPN OUTputs for configurable, scalable and correctable output signals for an easy DAQ integration.
- Automated data acquisition for individual measuring points with a smart data collection one-handed in the cabin
- NEMO sensor and volume flow, mass flow and CO₂
- Fluid temperature measured
- 5 point calibration correction curve/table
- 24/7 logging functionality on a USB memory stick as CSV file
- Display access

	NPN OUTputs	Press Ride	NEMO	LOG	Display
Two NPN OUTputs for configurable, scalable and correctable output signals for an easy DAQ integration.	X	O	X		
Automated data acquisition for individual measuring points with a smart data collection one-handed in the cabin	O	X	X	X	
NEMO sensor and volume flow, mass flow and CO ₂	X	X	X		
Fluid temperature measured	X	X	X		
5 point calibration correction curve/table	X	X	X	X	
24/7 logging functionality on a USB memory stick as CSV file	X	X	X	X	
Display access	X	X	X	X	X

O= optional available

All informations are subject to change.

