



AIC 7000 NEMO is designed for fuel consumption measurement on internal combustion engines. The ease of use, robust and durable design more than 30 years and the unique Swiss quality of the systems make them suitable for gasoline, diesel, biofuel and alcohol based fuel consumption measurements.

The AIC 7000 NEMO system is an integrated system for the measurement of engines (diesel engines) with supply and return for the fuel supply and motor-side arranged fuel pump (suction).

The measuring range is 1 to 200 l / h, and the power supply with 24V DC from the Board Computer 3329, the system can be operated in trucks directly from the vehicle battery. The AIC 7000 NEMO system can be easily integrated into the existing fuel circuit via optional fuel hoses with quick couplings.

On many engine types, the installed system not only provides for the fuel supply. All the functionality of the system consists of supplying fuel to the engine, returning the excess fuel back to the tank, and constantly circulating the fuel to cool the components. For a correct measurement of fuel consumption, the AIC 7000 NEMO system splits the original fuel circuit into two separate ones.

The result is an engine cycle and a tank cycle. This configuration allows the correct measurement of fuel consumption by the AIC 7000 NEMO sensor located between the tank and engine circuits. This sensor module is based on a piston counter.

In order to avoid overheating and thereby gas bubbles during engine run-in, the AIC 7000 NEMO contains a heat exchanger for cooling the fuel. The integrated fuel pump in the AIC 7000 NEMO system provides the necessary fuel circulation to the engine and cooling at the same time. For trouble-free operation, the system is protected by an easily accessible front loaded fuel filter.

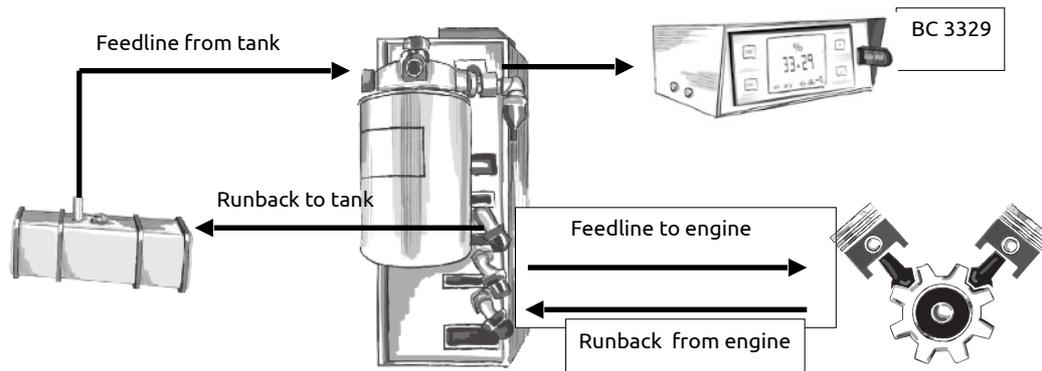
Applications:

- R&D testing: vehicle fuel consumption monitoring for medium and large trucks, buses, construction, demolition and agriculture machines
- Mobile tyre testing

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.
- Data easily retrievable via a FAT 32 formatted quality USB key stick
- Robust housing for shock protection

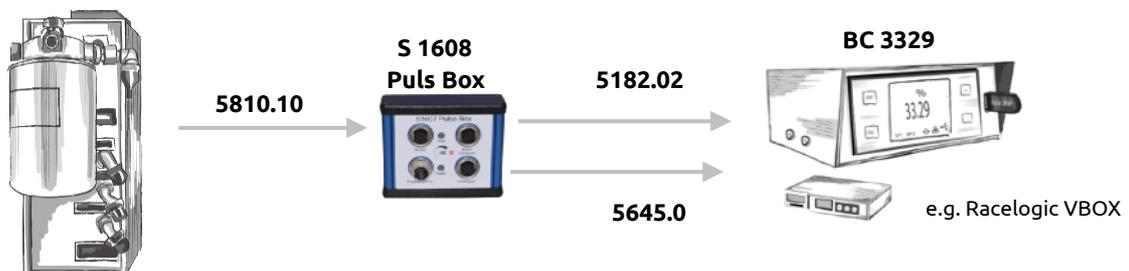
System Setup



Typical AIC 7000 NEMO Installation



Typical system setup with pulse box for third party connection

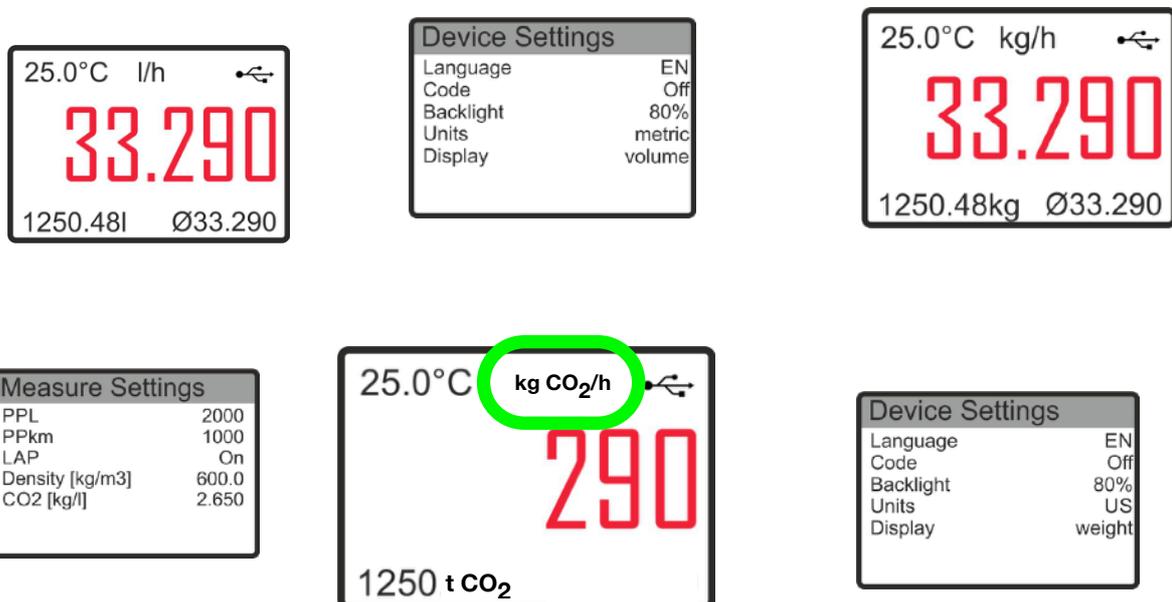


Technical data

	7008 NEMO	7004 NEMO
Engine KW / HP	735 KW / 1000 HP	515 KW / 700 HP
Accuracy	better than $\pm 1\%$ o.r	better than $\pm 1\%$ o.r
Consumption flow range	4 to 200 liters / hour	1 to 120 liters / hour
Repeatability	$\pm 0.2\%$	$\pm 0.2\%$
Pressure range:	-1 to 6 bar	-1 to 6 bar
Resolution - pulses per liter	804	2000
Signal	NPN open -collector; square 0.7 ms pulse width	NPN open -collector; square 0.7 ms pulse width
Housing	2 mm stainless steel 1.4301	2 mm stainless steel 1.4301
Protection	IP 65	IP 65
Fuel temperature	PT 1000	PT1000
Supply voltage through BC 3329	24 V DC	24 V DC
CE-conformity:	2014/30/EU	2014/30/EU
Dimensions (mm)	390 x 135 x 310	390 x 135 x 310
Weight incl. filter	14.3 kg	13.8 kg
Warranty	1 year	1 year

Board Computer BC3329 NEMO

On the Board Computer BC3329 NEMO has in addition input for temperature and density. All measured values can be easily seen and written off the large display and are logged on the USB stick in CSV format. For further use mass calculation with manual density entry (according to DIN 51757).



Service, maintenance and re-calibration

For trouble-free operation, the fuel filter must be replaced regularly. Access to the filter is easy as it is located on the front of the AIC 7000 NEMO system. Apart from a regular visual inspection, no further maintenance work needs to be carried out by the user. In any case, the fuel filter must be replaced regularly every 2 months or every 250 hours of operation.

For quality assurance, it is recommended to recalibrate the AIC 7000 NEMO system every 12 months. The re- calibration is carried out on test benches of AIC Systems AG in Switzerland.

Ordering Structure

Description	Oder code
AIC 7004 NEMO 24 V	s7004.00
AIC 7008 NEMO 24 V	s7008.00
Bord Computer BC 3329 NEMO for 20-28VAC/DC	3329.01
Cable 10m	5282.10
Mounting bracket INOX	470 105



AIC SYSTEMS AG

Ringstrasse 9

4123 Allschwil

Switzerland

T +41 61 481 84 39

www.flowmeter-aic.com

info@flowmeter-aic.com