

# ALEX

PROFESSIONAL AUTOGAS INSTALLATIONS

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## OPTIMA nano

is the most advanced computer unit controlling the sequential gas injection, in the ECU class with 24-pin link



**Optima nano** is designed for vehicles with a simple and extensive indirect fuel injection systems. Innovative algorithm of OPTIMA NANO controller precisely adjusts the dose of gas to the operating conditions and engine load in the full range of his work, thus reducing gas consumption. Connection of a standard OBD interface gives installers the ability to collect OBD map correction, injection time map of RPM and collector pressure and precise regulation of injection times, the RPM, collector pressure, temperature and gas pressure - it is a unique solution in this class of controllers. **OPTIMA is the first Polish LPG system which meets the requirements of stringent Euro 6 emissions standards.**

### OPTIMA NANO FEATURES:

- Above-average savings
- The innovative control algorithm
- Intuitive system usage
- Precise oscilloscope
- Protection of the petrol injectors Pb (exhaust valves protection)
- Ability to set smart post-injection
- Compact size and quick installation
- Designed and manufactured in Poland
- The system meets the emissions standard EURO 6

The controller possesses

E8 67R-016560 and E8 110R-006561 homologation



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# Comparison of the controllers

CONTROLLER	ALEX 32 by AEB	ALEX 48 by AEB	ALEX 48 OBD by AEB	ALEX 56 OBD by AEB	OPTIMA nano	OPTIMA EXPERT
Number of cylinders	4	4	4	4/5/6/8	3/4	3/4/5/6/8
Connector- number of pins	32	48	48	56	24	56
Case type	COMPOSITE	COMPOSITE	COMPOSITE	ALUMINUM	ALUMINUM	ALUMINUM
Day & night system					✓	✓
Additional RPM corrections	✓	✓	✓	✓	✓	✓
Additional corrections of reducer temperature		✓	✓	✓	✓	✓
Additional corrections of gas temperature		✓	✓	✓	✓	✓
Additional corrections of gas pressure		✓	✓	✓	✓	✓
Additional corrections of gas injectors opening		✓	✓	✓	✓	✓
Oscilloscope to observe the parameters of the installation	✓	✓	✓	✓	✓	✓
Looped petrol injection service					✓	✓
Compatibility with VALVETRONIC type engines	✓	✓	✓	✓	✓	✓
Compatibility with Wankla type engines					✓	✓
Compatibility with standard engines	✓	✓	✓	✓	✓	✓
Compatibility with turbo engines	✓	✓	✓	✓	✓	✓
Compatibility with different types of petrol injection control	✓	✓	✓	✓	✓	✓
Compatibility with different types of gas injectors	✓	✓	✓	✓	✓	✓
Compatibility with different types of gas level sensors		✓	✓	✓	✓	✓
Gas injector heating		✓	✓	✓	✓	✓
The ability to determine the maximum engine load and RPM while running on gas.	✓	✓	✓	✓	✓	✓
Reminder of control tests of the gas installation.					✓	✓
"Quick start" function		✓	✓	✓	✓	✓
Full anti-circuit and anti-overloading protection	✓	✓	✓	✓	✓	✓
Semiconductor emulation	✓	✓	✓	✓	✓	✓
3D gas and petrol maps					✓	✓
Automatic detection of petrol injection type					✓	✓
Operating on LPG and CNG fuel	✓	✓	✓	✓	✓	✓
The ability to download the RPM signal from camshaft level sensor.					✓	✓
The ability to download the RPM signal from crankshaft level sensor					✓	✓
The ability to download the RPM signal from injectors impulse		✓	✓	✓	✓	✓
The ability of a permanent switch off of particular gas injectors					✓	✓
The ability of emergency start on gas	✓	✓	✓	✓	✓	✓
Lambda probe service		✓	✓	✓	✓	✓
Records of past errors					✓	✓
Fuel overlapping		✓	✓	✓	✓	✓
Operating on external AFR probe					✓	✓
Injector switching strategies during fuel transitions	✓	✓	✓	✓	✓	✓
Quick switch off of the LPG/CNG installation					✓	✓
RPM decay time setting					✓	✓
The ability to display the history of changes in the controller					✓	✓
Signaling errors and status messages	✓	✓	✓	✓	✓	✓
Petrol secondary injection option		✓	✓	✓	✓	✓
Automatic detection of OBD reports			✓	✓	+ ELM	✓
Controller with OBD			✓	✓	+ ELM	✓
Monitoring of OBD parameters					+ ELM	✓
Adaptation based on the ECU correction reading			✓	✓	+ ELM	✓
Operating on reverse OBD correction					+ ELM	✓
Simplification of application view					✓	✓
Editable ranges of gas injection time( table of injection time in rotation function)		✓	✓	✓	✓	✓
Additional correction map depending on MAF					✓	✓
Additional correction map depending on the collector pressure					✓	✓
Leaning on a cold engine					✓	✓
Signalling running on petrol					✓	✓
Signalling a warm reducer					✓	✓
Emulation of lambda probe before the catalytic converter		✓	✓	✓		✓
Emulation of lambda probe after the catalytic converter		✓	✓	✓		✓
Erasing selected errors OBD2 / CAN						✓
Universal Fuel pressure Emulator						✓