

Application

STAG-300
ISA²

The controller is designed for all cars with petrol engines with 1 to 8 cylinders, including a Valvetronic throttle less intake system (used e.g. in BMW engines), turbo, full group and sequential and semi-sequential petrol injection. The controller is also capable of serving Wankel rotary piston engines. The petrol injection emulator embedded in the controller is terminated with a Europe/Bosch type connection. **STAG-300 ISA²** supports the AcGasSynchro software.



STAG-300

ISA²

INTELLIGENT

The system ISA² is the ideal controller for your car



STAG-300
ISA²

Smart self-Adaptation system second generation.



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STAG
automotive gas systems

A new generation system

STAG-300
ISA²

The microprocessor Sequential Gas Injection Controller **STAG-300 ISA²** has evolved from the tried, tested and reliable system **STAG-300 Plus**. The controller has been upgraded by used with the second generation Smart Self-Adaptation System **ISA²**.

The main task of the **ISA²** System is the continuous and automatic modification of the gas maps as a function of the engine's rotational speed.

After turning the „Self-Adaptation“ option on, the collection of petrol map points takes place. Sound signals inform the driver whether or not the map has been collected properly. After the petrol maps have been created, the **ISA²** system automatically switches the controller over to gas. From then on, the self-adaptation is done by continuously comparing the operation of the engine for definite parameters (load and rotational speed) with the previously collected master petrol map of gas. Owing to an innovative solution, **ISA²** System provides a more accurate calculation of the dose of gas supplied to the intake manifold of the petrol engine.



Additional advantages

STAG-300
ISA²

The controller is equipped with an advanced software. The device also allows the manual adjustment of operating parameters based on the gas temperature and the PRMs. In addition, an option of serving Wankel rotary piston engines has been implemented in the controller as well as the ability to read out the engine RPM signal from the camshaft sensor. The software also has the function of releasing the gas pressure during the cut-off and a gas injector warm-up option.

Additional controller software means that the cars with a system based on the **STAG-300 ISA²** controller meet Euro 5 exhaust emission standards.

The advanced technology and the top quality of the product ensure the reliability of **STAG-300 ISA²**.

New functions of the controller

STAG-300
ISA²

- ✓ Smart Self-Adaptation System ISA 2 (automatic modification of the gas map as a function of engine rotational speed)
- ✓ Correction of reducer pressure at cut-off
- ✓ Injector warm-up at reducer temperatures $\leq 10^{\circ}\text{C}$
- ✓ Monitoring of gas injector warm-up (minimization of the occurrence of the engine ECU error – „check engine“)
- ✓ Capability to serve Wankel rotary piston engines
- ✓ Capability to pick up RPM signals from the camshaft position sensor
- ✓ Extended gas injector (HANA 2000) and gas temperature sensor (REG RAIL SL) selection list
- ✓ Additional sound signal informing of the engine start in the emergency mode
- ✓ Capability to set a maximum number of emergency starts

