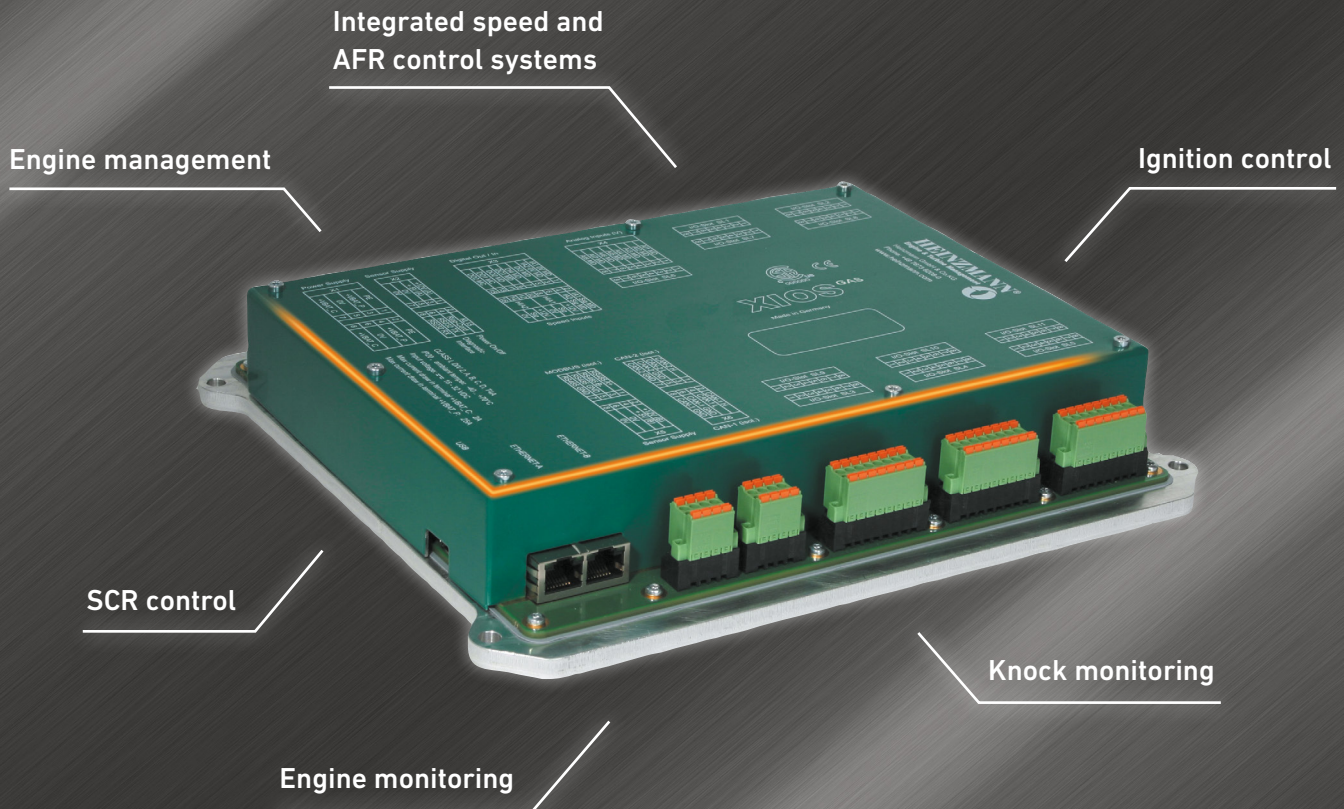


Complete system for controlling & monitoring gas engines

XIOS^{GAS} ENGINE CONTROL

Efficient - Stable - Clean



EFFICIENT - STABLE - CLEAN

HEINZMANN is an established system supplier of engine management solutions for combustion engines. We offer a variety of reliable control units for the industrial sector. From power generation to direct drives in ships our products are used successfully in a wide range of applications. The newly developed and extensively tested engine control system for gas engines combines all the advantages of HEINZMANN control systems.

Speed and air-fuel ratio control, ignition control, knock monitoring and SCR control, as well as extensive monitoring functions, are combined in a central XIOS^{GAS} Control Unit. This enables reliable production and utilisation of heat and electrical energy, either in grid-parallel or island operation.

With extensive inputs and outputs, various communication protocols and user-friendly HMI touch screens, XIOS^{GAS} offers its users full control over their CHP plant with minimal effort.

FEATURES

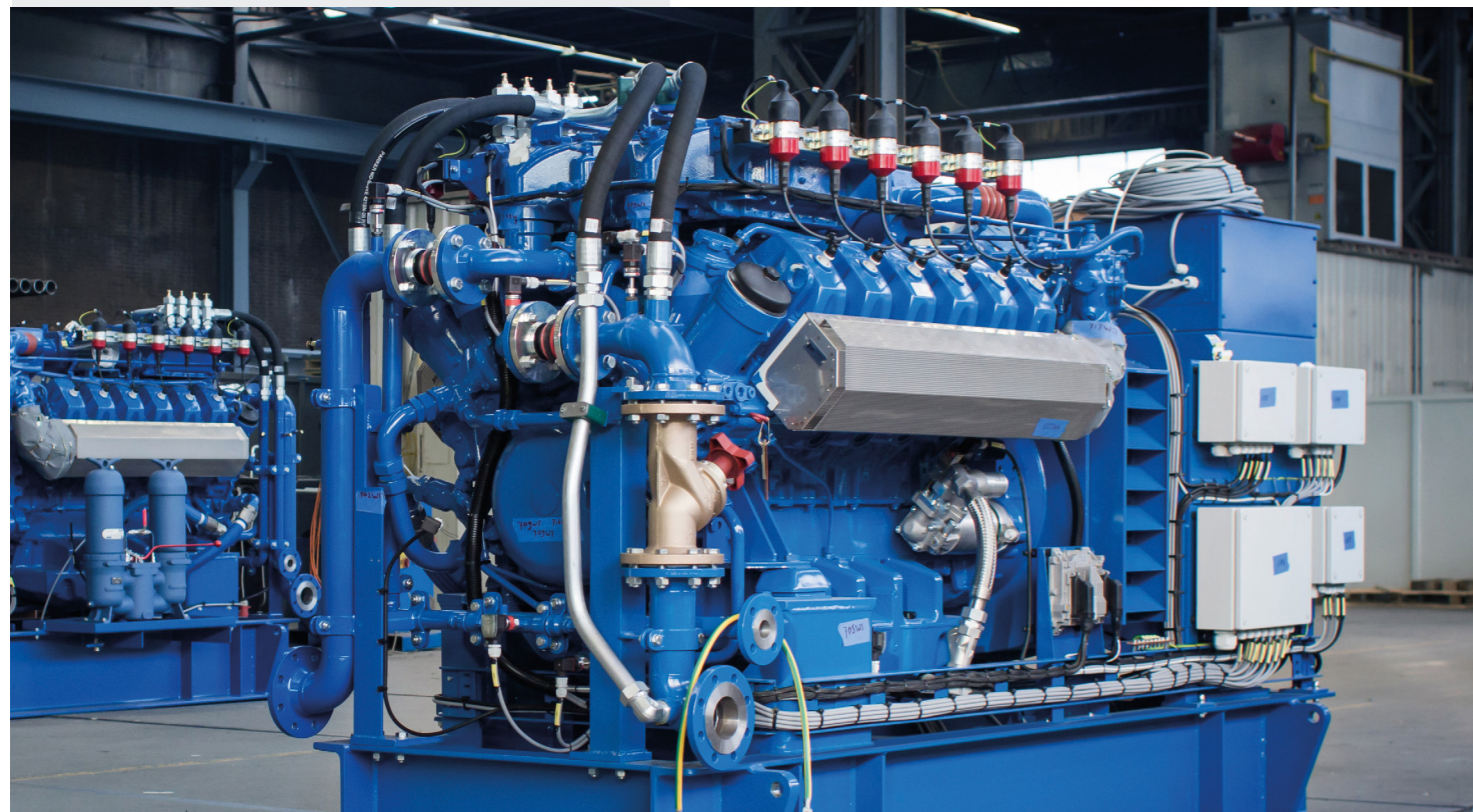
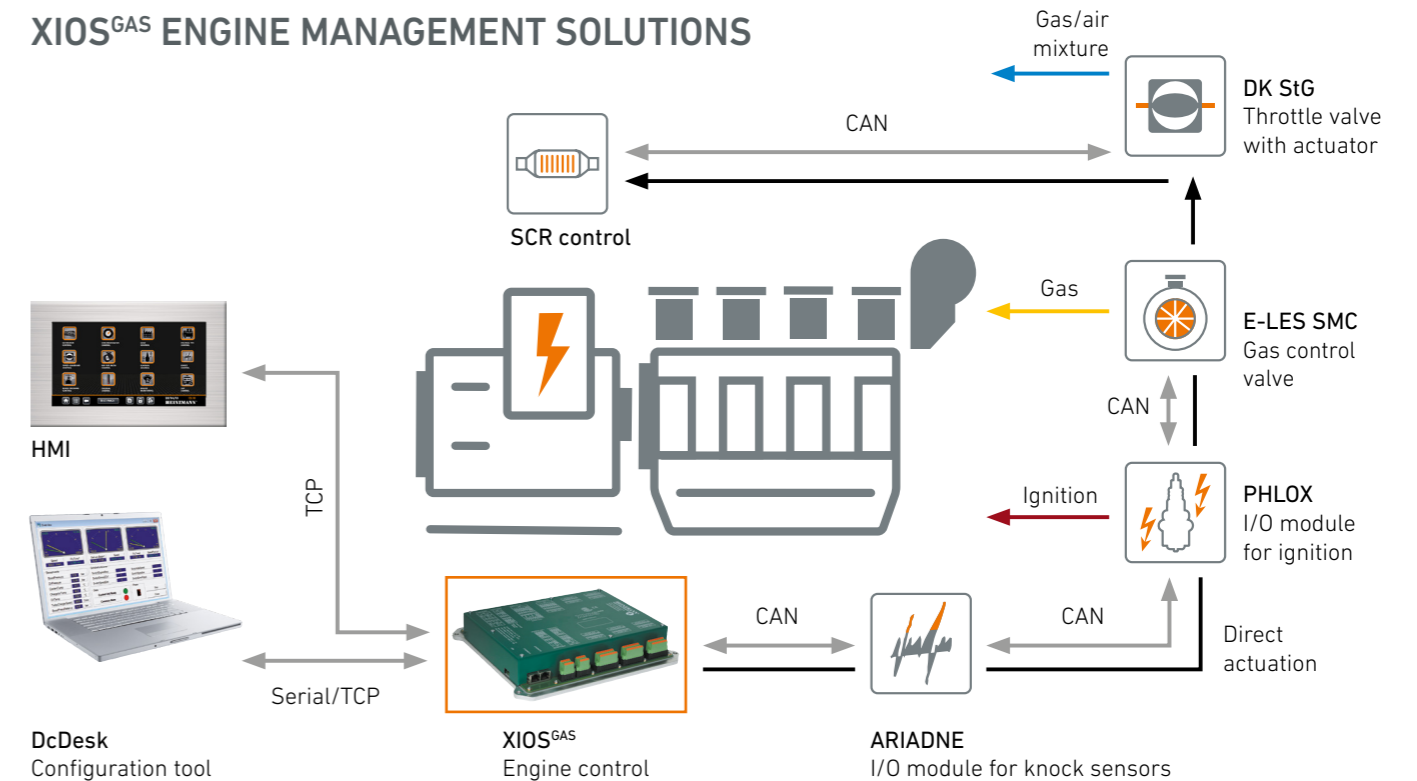
- ▶ Integrated speed and load control for optimum system response
- ▶ Integrated air-fuel ratio control
- ▶ Control of PHLOX II & III Ignition Systems
- ▶ Control of ARIADNE Knock Control
- ▶ Extensive engine monitoring functions
- ▶ Data logger (incl. real time clock) for NO_x daily average value, for fault analysis and system overview
- ▶ Service access via touch screen, HEINZMANN DcDesk or the dongle-free HEINZMANN Configuration Suite service tool

XIOS^{GAS} VERSIONS

In order to meet individual customer requirements, various versions of XIOS^{GAS} are available. In addition to speed and air-fuel ratio control, the basic features of XIOS^{GAS} include a range of monitoring functions. Integration of the PHLOX II or PHLOX III and ARIADNE I/O modules enables ignition control and knock monitoring to be implemented.

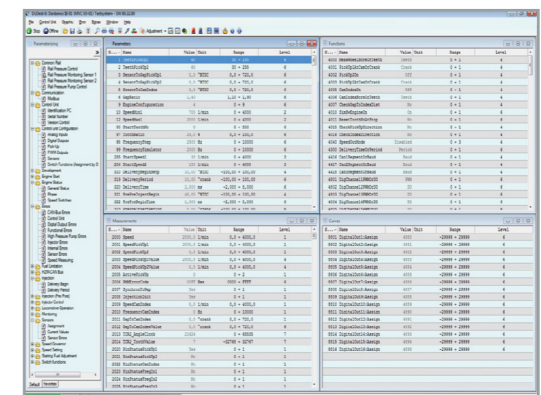
As an option, the system can be expanded to include SCR control and/or monitoring of the NO_x daily average value. Various user-friendly HMI touch screens guarantee ease of operation, display all relevant operating conditions and enable system settings using password-protected access areas.

XIOS^{GAS} ENGINE MANAGEMENT SOLUTIONS



XIOS^{GAS} SYSTEM SOLUTIONS

The HEINZMANN XIOS^{GAS} system provides easy-to-use, user-friendly HMI touch screens that enable intuitive and convenient operation. For advanced system access, HEINZMANN's DcDesk Service and Parametrisation Software and the dongle-free HEINZMANN Configuration Suite can be used.

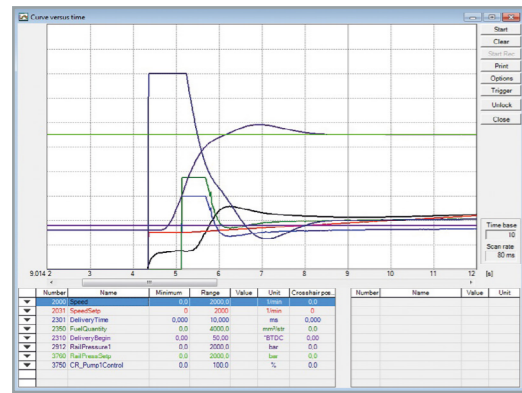


Parametrisation of digital HEINZMANN systems

DCDESK SOFTWARE

- Windows-based software
- Convenient configuration, parametrisation and programming of digital control units

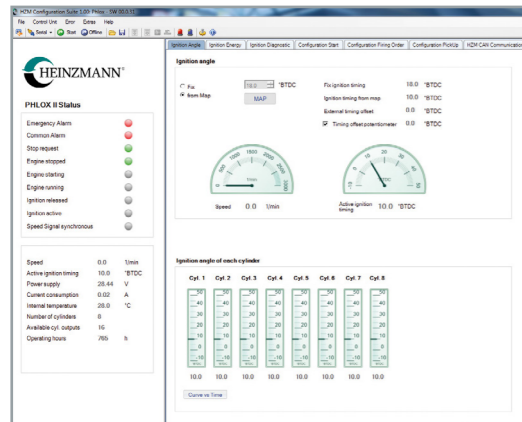
- Various display and recording functions
- Perfect for factory default settings, commissioning and service



Display of measurement values over time. Up to 20 measurements can be displayed simultaneously.

CONFIGURATION SUITE

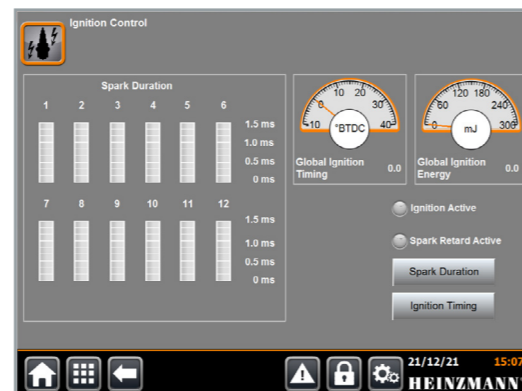
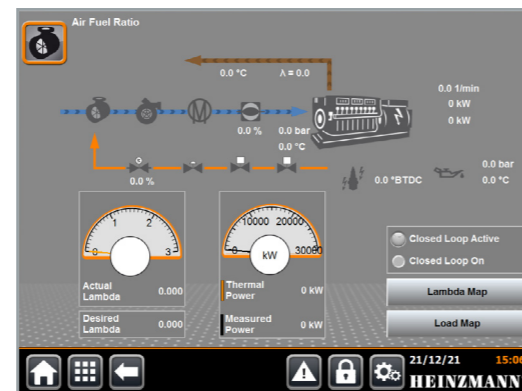
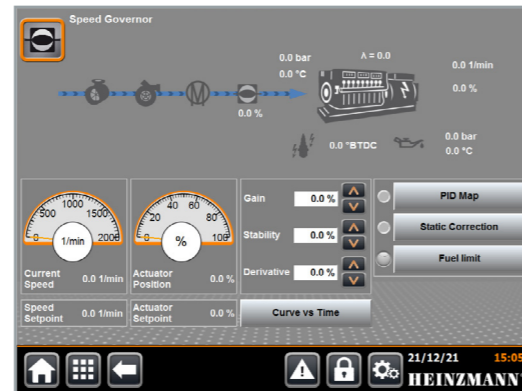
- Dongle-free service tool
- Allows creation of customer and system-specific user interfaces
- Based on a graphical interface
- Access to digital HEINZMANN control units
- Easy and comprehensible presentation of complex issues



New dongle-free service tool that allows creation of customer and system-specific user interfaces.

HEINZMANN HMI TOUCH SCREEN

- 7" to 15" screen, resistive or capacitive
- Intuitive symbol-based menu system
- Navigation bar with date, time and main control elements
- Password protected access areas
- Customer-specific system overview/main screen possible
- Robust design for industrial applications



XIOS^{GAS} FUNCTIONS AT A GLANCE

Central control of all system functionalities of gas engines with the modular, multifunctional XIOS^{GAS} controller. This can be combined with a wide range of system components and is therefore suitable for any type of application.



Engine management

- Integrated speed control
- Integrated air-fuel ratio control (with power, lambda or NO_x as feedback signal)
- Control of PHLOX II & III Ignition Systems
- ARIADNE Knock Control



Knock monitoring

- ARIADNE Knock monitoring control
- Monitoring of knocking combustion
- Ignition timing correction and power reduction



Ignition control

- Control of PHLOX II & III Ignition Systems
- Speed and load dependent ignition timing
- AutoSpark or FlexSpark function for optimising the ignition process



Speed control

- Integrated speed control
- Rapid response to changes in speed and load
- Can be combined with any HEINZMANN actuator



SCR control

- No compressed air required
- Scalable for engine sizes up to 2 MW
- Excellent safety based on numerous monitoring functions
- Rapid response to load steps
- AdBlue tank management



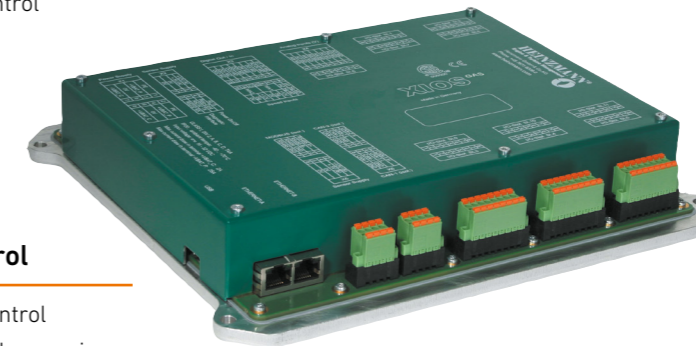
Engine monitoring

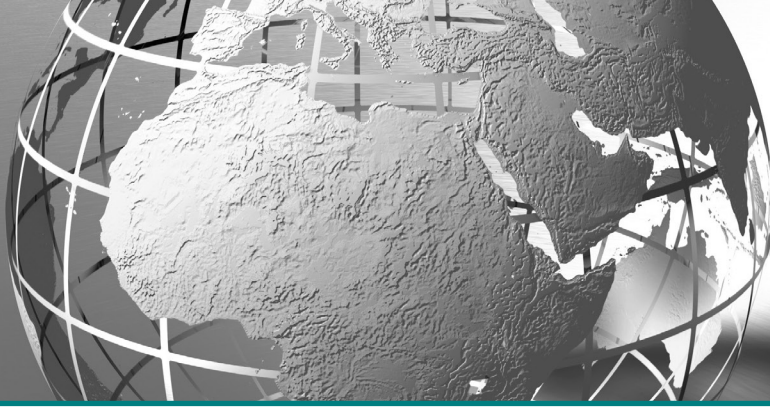
- Overspeed protection
- Oil pressure, 2-stage
- Oil level, 2-stage
- Oil temperature
- Cooling water pressure, 2-stage
- Cooling water temperature, 2-stage
- Intake manifold temperature, 2-stage
- Exhaust temperature, 2-stage
- Knocking combustion (optional)
- NO_x daily average value
- Data logger with different recording rates; High resolution data recording before, during and after events; Long term data recording for general overview



Air-fuel ratio control

- Integrated air-fuel ratio control
- Power, lambda or NO_x as feedback signal
- Tailored system solutions for different gas qualities





HEINZMANN GROUP - THINKING IN DRIVE AND CONTROL

HEINZMANN is a globally active family business founded in 1897 with its headquarters in Schönau (Germany), in the Black Forest.

Today, in the field of engine management HEINZMANN is one of the leading suppliers of components and systems for industrial combustion engines, generators and turbines. As a specialist and development partner, HEINZMANN is committed to developing exactly the right solution for increasing efficiency and reducing emissions.

In the Electric Drives division, HEINZMANN also demonstrates innovative strength and development expertise in engine technologies of the future. The company has established itself as a reliable partner and system provider for electric drive systems.

Our collaborative interaction with more than 40 globally active subsidiaries and sales companies characterizes the spirit within the HEINZMANN group of companies and makes us a reliable partner.

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