

# Lambda Control

## AF-2000

### Product Features

- Precise Lambda control
- Can-Bus communication
- Graphical display
- History record (200 events)
- Password protected (3 levels)
- Language selection
- Key pad control
- Numerous I/O's
- Configurable In and Outputs
- Display sealed IP65



### Air fuel ratio always under control

### Advantage

- Perfect price performance ratio
- O2-Drift compensation
- Remote access to genset controllers possible
- Reduced wiring
- Programmable via key pad and PC software

The AF-2000 is a unique and enhanced Lambda Control unit combined with an I/O Module. A modern control platform with a powerful microprocessor and a large memory unleashes numerous features and flexibility.

It is used in all gas engine application such as stoichiometric and lean burn. Mapping power, boost pressure, temperature and other parameters result in a very precise and fast responding air fuel ratio control.

Monitoring combined with logic functions allows the user a wide combination and therefore the AF-2000 can be adapted to any application task.

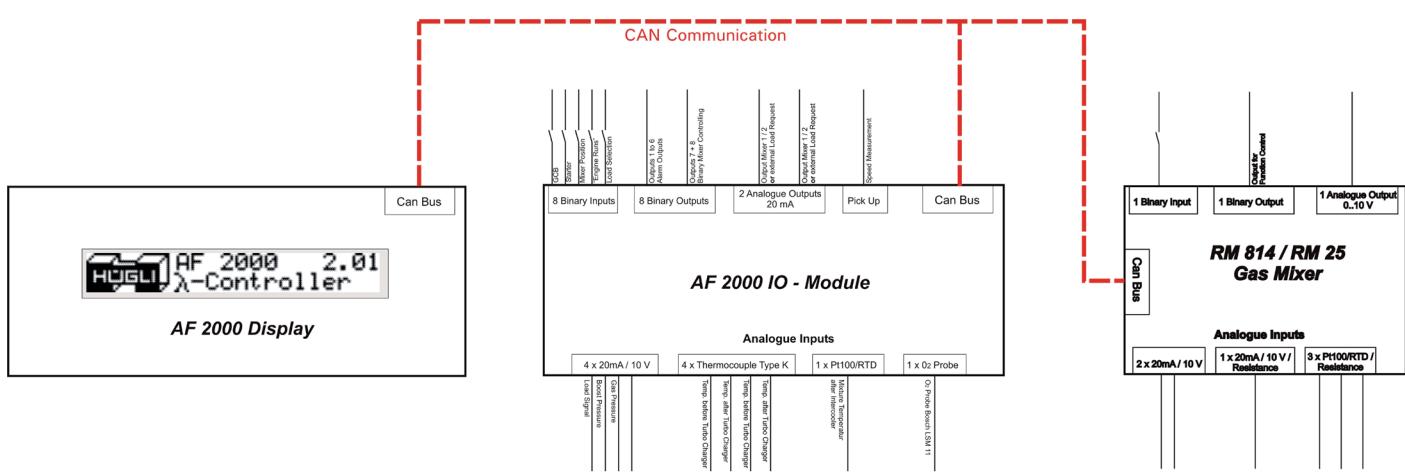
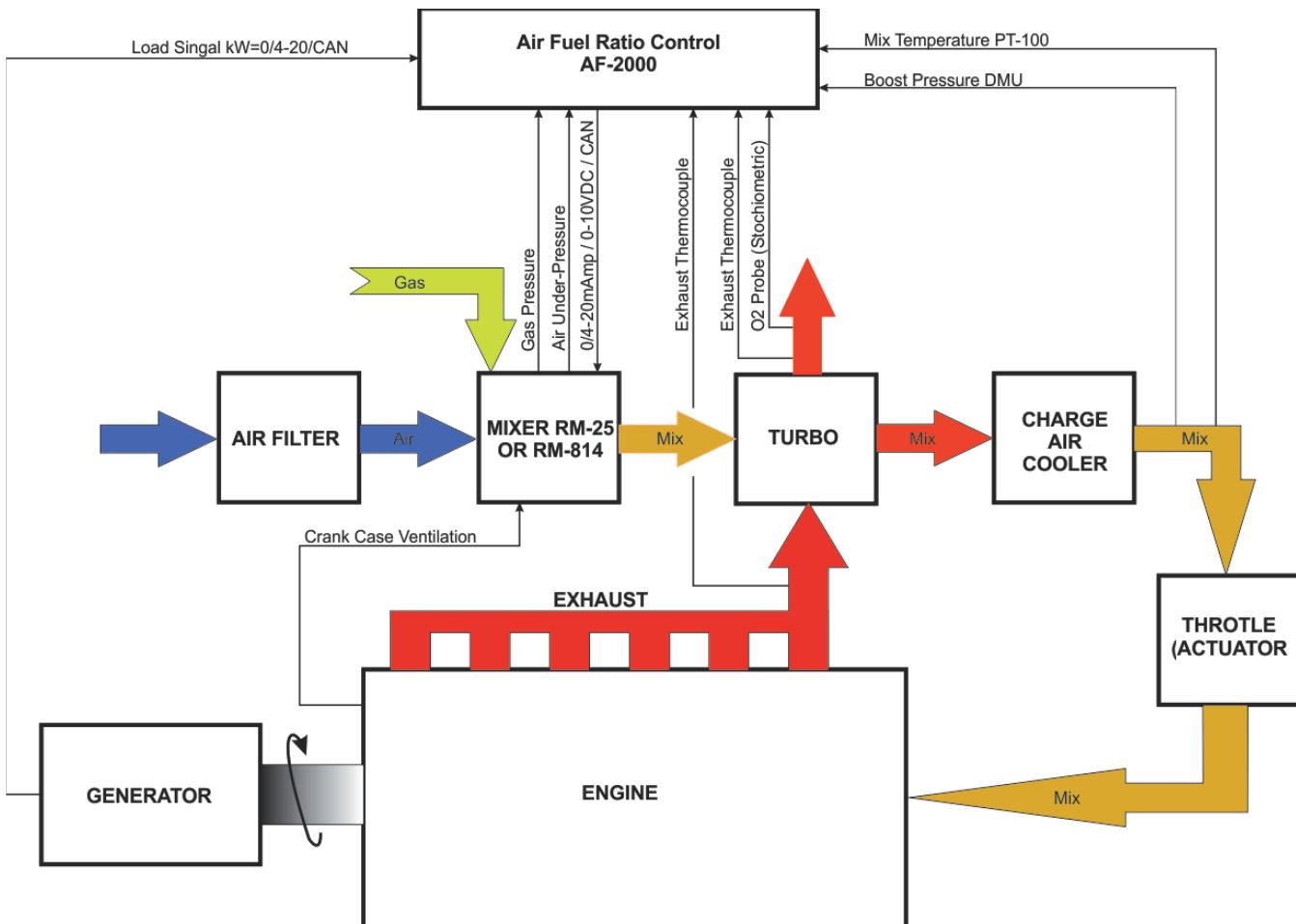
CAN Bus communication to other peripheries facilitate remote access and wiring issues.

A powerful graphical display, icons symbols and bar graph for intuitive operation set a new standard for the gas engine controls.

# Lambda Control

AF-2000

## Application Example



## Technical Specifications

### Control Unit

Supply Voltage.....	24 V DC (+/- 25%)
Current consumption.....	<0,6A
Communication Interface.....	Can-Bus, RS 232 und RS 485
Display.....	Graphical LC-Display, 120 x 16 Dots, Background illuminated
Keypad.....	4 System keys, 10 Function keys
Housing.....	electro plated housing 141 x 69 x 32 mm
Mounting hole.....	137 x 65 mm
Front Display.....	144 x 72 mm
Weight.....	0,4 kg
Operation Temperature.....	0 ... + 45 °C
Storage Temperature.....	- 20 ... + 70 °C
Humidity.....	DIN 40040
Vibration.....	IEC68-2-6 ..... 15 ... 57 Hz, Amplitude 0,15 mm ..... 57 ... 150 Hz, Acceleration. 1,0g
EMI CE-Regulation.....	Approved according EN50082-2 / 2.96 .....EN61131-2 / 8.94

### I/O Module

Supply Voltage.....	24 V DC (+/- 25%)
Interface.....	Can-Bus
Digital Input.....	8 Input 24 V DC, Low threshold< 5 V, .....High threshold > 15 V

Digital Out.....	8 Output 24 V DC, max. 0,5 A, .....Whereas 2 can be used for PWM
Analogue Input.....	4 Input 0..10 V / 0..20 mAmp, 10 Bit .....4 Input for Thermocouple Typ K, max. 900°C, 10 Bit .....1 Input for Pt100, max. 120°C, 10 Bit .....1 Input for Lambda sensor, 10 Bit
Analogue Output.....	2 Output 0..20 mAmp .....(0..10 V with Shunt), 10 Bit
Dimensions.....	183 x 72 mm
Mounting.....	35 mm DIN Rail
Operation Temperature.....	0 ... + 45 °C
Storage Temperature.....	- 20 ... + 70 °C
Humidity.....	DIN 40040
Vibration.....	IEC68-2-6 ..... 15 ... 57 Hz, Amplitude 0,15 mm ..... 57 ... 150 Hz, Acceleration. 1,0g
EMI CE-Regulation.....	Approved according EN50082-2 / 2.96 .....EN61131-2 / 8.94
Electrostatic discharge.....	EN 61000-4-2 .....Contact min. 8 kV .....Air gap min. 15 kV
Electromagnetic field.....	ENV 50140 / ENV 50204 ...80 MHz - 1 GHz 10 V/m 80% AM (1 kHz)



Making the most use out of the AF-2000 is to combine it together with the RM series Mixer. This enables more features and is also cost saving for any application. Additional I/O's on the Mixer PCB prevent from using costly extensions.

### Local Distributor / Partner:



HUEGLI TECH AG (LTD)  
Murgenthalstrasse 30  
4900 Langenthal Switzerland  
Phone: +41 62 916 50 30  
Fax: +41 62 916 50 35

e-mail: sales@huegli-tech.com  
www.huegli-tech.com