

# Extension Module

## HT-CL-AF1500P

### Common features:

- Stand-alone device or for connection to HUEGLI TECH Controllers or Controllers with J1939 protocol
- Accepts Boost Pressure 4-20mAmp or 0-5VDC
- Special SW algorithms allow precise air fuel ratio.
- Configuration via USB and PC software
- Communication via CAN bus (supports various protocols)
- Input Power 7-30 VDC
- -40°C - +85°C
- DIN Rail 35mm



## CuteLine Lambda and Mixer Module

Simple control of gas and air volume: the boost pressure, load and temperature input is processed through a PID loop and the result fed to the gas-mixer to vary the amount of gas supplied to the engine.

Efficient gas volume regulation has a name: HUEGLI TECH CuteLine HT-CL-AF1500P.

The direct CAN Bus Communication with the Gen-Set Controller works simply and effectively, with a minimum of wiring.

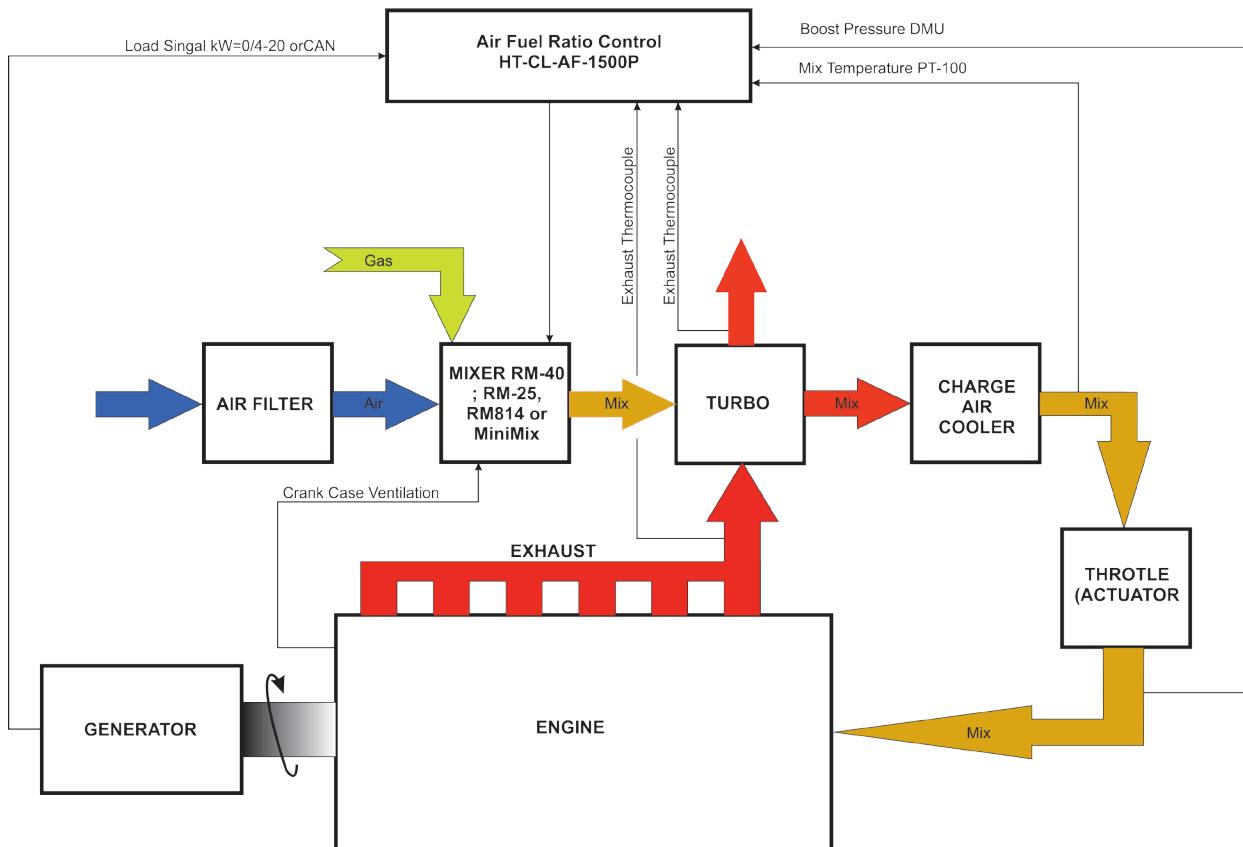
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## System Overview

Turbocharger pressure is also named boost pressure. The boost pressure based Lambda control uses the current load of the engine and the actual boost pressure. Therefore it can only be used for turbo charged engines.

There is a linear relation between load and boost pressure depending on the Lambda value. If the mixer is controlled manually to a fixed Lambda value, and when the load is increased, the values of load and boost pressure will raise linear.



Hence, the controller needs a map of load and boost pressure to be configured while commissioning. Once the map is set the mixer is controlled by the requested boost pressure (which is calculated by the actual load) and the actual boost pressure.

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## Technical Data

Supply Voltage.....	7-30VDC, with reverse polarity protection
Current Consumption.....	<500 mA with 24 VDC Input @25°C
No. of Inputs.....	7, 6 analogue, 1 binary, non isolated
No. of Outputs.....	1, non isolated for stepper motor control
Types of outputs.....	Stepper motor control

Sensor Types/Range	Boos Pressure Sensor Voltage Input.....	Current input.....	4-20mAmp
	Load Signal	Current Input.....	0-5VDC
	Exhaust Gas Tempearatures.....		0-20mAmp / 4-20mAmp
	M(anifold) A(ir) T(emperature).....		Thermocouples K-Type
	Feedback Sensor		PT 100 (RTD)
		Voltage Input.....	0-5VDC

Supported communicationsprotocols .....	Can Bus HT Controller J1939, ModBus RTU (for module configuration)
Operating Temp. range.....	-40 to +70 °C (-40 to +158°F)
Storage Temp. range.....	-40 to +85 °C (-40 to +185°F)
Relative Humidity.....	.5 to 95%, non condensing
Dimensions (incl. connectors).....	30 x 110 x 94 mm
Mass (incl. connectors).....	205g
Wiring size.....	0.34 to 1.5mm <sup>2</sup> (AWG 22 to 16)
Mounting.....	DIN Rail 35 mm

## Other Modules:

HT-CL-AF1000LS:.....O2 Probe (LSU 4.2) Lambda Controller

HT-CL-MIXRMV:.....Dual Driver Module for Mixer RMV-40-ZXX

HT-CL-AIN8T.....Analogue input temp module

HT-CL-AIN8UI.....Analogue input volt/curr module

HT-CL-AOUT4.....Analogue output volt/curr module

HT-CL-BIN8.....Binary input module

HT-CL-BOUT8.....Binary output module



Local Distributor / Partner:



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