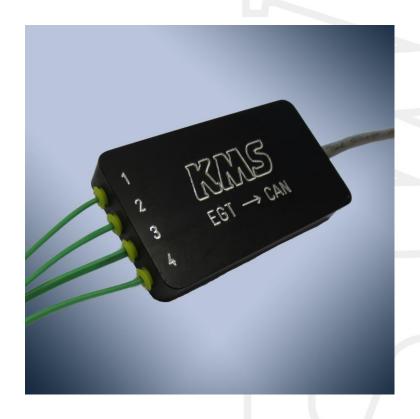


## KMS EGT → CAN converter 4-channel

Part nr: 01-01-01-0011



**Kronenburg Management Systems** 

This document contains detailed information about the KMS EGT→ CAN converter 4-channel. Additional information, user manuals, wiring examples and software can be found on our website: http://kms.vankronenburg.nl or on the software CD included with the ECU.

The KMS EGT → CAN converter 4-channel enables users to measure and monitor temperature using four K-type thermocouple sensors. As the KMS EGT to CAN converter is not equipped with a display (unlike the KMS EGT display kit), monitoring the 4-channel inputs can be done on the KMS CAN display, KMS motormanagment software or data logging.

The KMS EGT 4-channel CAN module has a temperature range from 0 to 1200 °C with an accuracy of  $\pm 1\%$ . This means that it's also possible to use the thermocouple sensors for measuring other temperatures beside EGT, for example for oil-, air-, brake- or watertemperature.

## Contents of the package

- 1 KMS EGT → CAN converter 4-channel
- 1 KMS CAN extension hub 2m
- 1 Instruction manual

## Installation of the EGT -> CAN converter 4-channel

The KMS EGT  $\rightarrow$  CAN converter 4-channel is splash waterproof. However it's best to place it in a dry place where temperatures don't exceed 65°C.

<u>Warning</u>: don't place the EGT CAN module and wires near any 'high powered' cables (sparkplug leads, etc), because of electrical interference.

There are four green thermocouple connectors and one black CAN-bus connector coming out on both sides of the EGT  $\rightarrow$  CAN converter 4-channel. The connection of these wires and connecters is as follows:

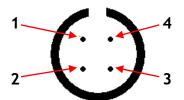
- Male black 4-pole connector (binder type): Communication to CAN bus
- Female Green 2-pole connector (K-type): Connection to K-type thermocouple
- Green PTFE cable: Consists of two wires:
  - o Green wire: + signal from K-type thermocouple
  - White wire: signal from K-type thermocouple

Input numbers are indicated on the EGT  $\rightarrow$  CAN converter housing for each thermocouple cable.

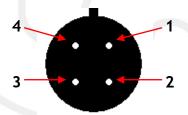
Wiring of the black 4-pole CAN-bus connector is as follows:

Pin nr	Colour	Function
1	Red	12V supply
2	Black	Ground
3	White	Can High (+)
4	Green	Can Low (-)

Front of the male CAN connector:



Front of the female CAN contra connector:





After installing/wiring the EGT  $\rightarrow$  CAN converter 4-channel, the KMS management software must be set up correctly. Refer to the instructions below and in the management software manual for more information.

The KMS ECU and Motormanagement software use thermocouple input 1 as the first EGT for all corrections (boost, fuel and aux) in the software. Thermocouple input 2 and higher are used as the  $2^{nd}$  and higher EGT's for the aux output functions. When both an KMS EGT  $\rightarrow$  CAN converter and KMS EGT display are connected to the KMS ECU, the KMS EGT  $\rightarrow$  CAN converter will be used for the EGT input corrections in the Motormanagement software.

In case of a broken or disconnected sensor (broken wire), this is regarded as a fault by the ECU and the function is skipped and automatically switched off.

