



EM80-M

The EM80-M is a derivative of the EM80. It combines the existing engine management system with a powerful ARM processor setup to enable the use of auto generated code from Simulink® models. This allows the user to design and implement their own complex control systems on a proven and rugged platform with the use of GEMS user interfaces and analysis packages. It can be supplied with existing engine management code or with a cut down base platform.

GEMS have been designing and manufacturing engine management systems for over 25 years and bring all of that experience along with the latest technologies to provide this highly capable yet cost effective system.

+ Features

- > Fully configurable with GWv4 software*
- > Gearshift control
- > Adjustable fuel timing for engine speed and load
- > Closed loop lambda control
- > Turbo wastegate control
- > Uneven firing angles
- > Multiple maps
- > ARM STM32F4 Processor with FPU
- > Supplied with support files for auto code-generation from Simulink® models using Embedded Coder and generation of firmware images from Embedded Coder output
- > High speed internal data-logging
- > Anti-lag system with fuel and ignition cutting with ignition retard
- > Drive by wire throttle control
- > 4 channel variable valve timing

+ Specifications

- > 8 x 20A peak IGBT ignition drivers
- > 4 x 6A PWM half bridges
- > 12 x 0-5V 12bit analogue inputs
- > 4 x Software selectable Logic or VR timing inputs
- > LSU4 Wideband lambda input
- > Internal barometric sensor
- > Ethernet PC comms
- > Size: 157 x 131 x 35mm (6.18"x5.16"x1.38")
- > 8 x injector drivers with peak and hold
- > 12 x 3A PWM low side drivers
- > 2 x Differential Analogue Inputs
- > 8 x Logic timing inputs
- > 2 x CAN2.0 bus
- > 256MByte logging memory
- > 32KByte per second logging throughput
- > 80pin Molex CMC connector

* GWV4 software supplied seperately

INDUSTRY SECTORS

- > Rallying
- > Racing
- > Motorcycles
- > Aviation
- > OEM & Custom

PRODUCTS AND SERVICES

- > Engine Management Systems
- > Transmission/Shift Control Systems
- > Dash Display Systems
- > Data Acquisition Systems
- > Power Management Systems

GEMS
Crabtree Road
Egham
Surrey
TW20 8RN
United Kingdom

T +44 (0) 1784 470525
F +44 (0) 1784 470527
E info@gems.co.uk

www.gems.co.uk