

Engine Control Module On-Highway, 24 Vdc

Description

The ECM-OH is part of the engine management system for on-highway applications, which can include L6 4-stroke CNG intercity transit applications, L6, 4-stroke LNG intercity transit applications, and L4 4-stroke commercial vehicle applications.

The module is capable of full authority digital engine control (FADEC) consisting of fuel, spark, and air delivery to the engine. Additional inputs and outputs are available to control other system functions, as defined by software.

This unit provides 112 connector pins with inputs, outputs, and communications interfaces that support a wide variety of applications.

The ECM-OH is part of the MotoHawk Control Solutions ControlCore[®] family of embedded control systems. The ControlCore operating system, MotoHawk[®] code generation product, and MotoHawk's suite of development tools enable rapid development of complex control systems.

Each controller is available in 'F' (Flash) or 'C' (Calibratable) versions. Flash modules are typically used for production purposes. Calibratable modules are typically for prototyping/development only; they can be calibrated in real time using MotoTune[®] or ToolKit.

Physical Dimensions

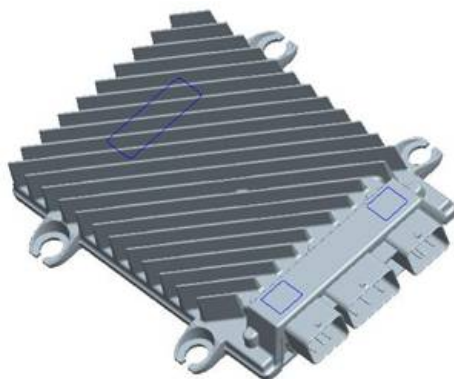
Approximate dimensions: 281 mm x 226 mm x 37 mm (including feet)

Ordering Information

Please contact your Woodward account manager.

Availability

First samples available in early 2012. Production in Q3 2012.



- 112-pin platform
- Main micro: MPC5642A, 120 MHz
- Auxiliary micro: S12G128, 24MHz
- Memory: 2M flash, 128K RAM, 32K external serial EE; S12G128, 128k flash, 8K RAM, 4K EE
- Calibratable micro: MPC5644A, 4M flash, 192K RAM
- Operating Voltage: 8–32 Vdc, 36 V (jump start), 5.5 V (crank)
- Operating Temperature: –40 to +105°C

Inputs:

- VR or digital crank position sensor
- VR or digital cam position sensor
- Up to 31 analog inputs
- Up to 4 switching oxygen sensors
- Up to 2 wide-range oxygen sensors
- 2 knock sensors
- Up to 6 speed inputs

Outputs:

- 8 injector drivers (6 peak/hold capable)
- Up to 8 ignition coil drivers or spark timer outputs
- 1 tachometer driver
- Up to 19 low-side drivers (1 w/current sense)
- 1 main power relay driver
- 2 H-bridge drivers w/current sense
- 3 sensor supplies (2-5V, 1-12V)

Communications:

- Up to 3 CAN 2.0b buses
- LIN or RS-485 options available



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Distributors & Service

Woodward has an international network of distributors and service facilities. For your nearest representative, call the Fort Collins plant or see the Worldwide Directory on our website.

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