

EC12 ENGINE CONTROL MODULE

ENGINE CONTROLS



THE HEART OF YOUR ENGINE MANAGEMENT SOLUTION

- *ADVANCED INDUCTIVE IGNITION*
- *MAINTENANCE FREE*
- *ROBUST CONSTRUCTION*
- *FULLY PROGRAMMABLE*
- *ADVANCED DIAGNOSTICS*
- *UP TO 12 CYLINDERS*
- *CANBUS COMMUNICATION*
- *SPARK DIAGNOSTICS*
- *CHP ENGINES*
- *GENERATOR SET ENGINES*
- *COMPRESSOR ENGINES*

EC12 ENGINE CONTROL MODULE

The hub of your engine control system, EC12 combines state of the art inductive ignition with advanced spark diagnostics in addition to CANBUS communications to provide full access to air/fuel and knock control.

EC12 is a robust, solid-state electronic module that provides highly accurate and extremely powerful inductive ignition, which when tailored with the Gill range of ignition coils, produces spark durations well in excess of any CDI ignition system.

This power and accuracy enable the EC12 to control normally aspirated or turbo-charged engines, running on natural gas, biogas, LPG and CNG in either lean burn or stoichiometric air/fuel ratios.

Features include:

- Fully programmable via easy to use Windows® based GUI
- Flexible User Security Feature
- Programmable for number of cylinders up to 12-cylinders (24 cylinders possible by linking two units)
- Ignition point – fully programmable for load, speed, temperature and fuel type
- Fully programmable dwell with auto supply voltage compensation for total control of spark energy and duration
- Universal timing disc available

- Advanced Temperature Mapping
- Factory configurable for OEM engine timing disc patterns and sensors
- Fuel valve drive for controlled engine shutdown
- On-board visible status indicators
- Advanced diagnostics accessible via GUI
- Advanced 'Spark Diagnostics' to monitor the real-time performance of spark plug voltage and spark duration.
- CANBUS link for access to advanced features such as air/fuel and knock control using other Gill Engine control modules

Designed to be user-programmable via the Windows® GUI, EC12 provides extensive flexibility. With fully-programmable speed mapping and load mapping curves, in addition to configurable controlled engine shut-down, you can expect to see improved engine efficiency, lower exhaust emissions, reduced engine maintenance and decreased engine operating costs.

Advanced spark diagnostics provide realtime spark duration and spark voltage measurement to ensure optimum HT lead / spark plug operation. With the ability to be factory configured to accept timing information from OEM timing disks and sensors, EC12 reduces engine set-up and development times considerably, helping to ensure that costs are kept to a minimum.

NUMBER OF CYLINDERS

Up to 12 cylinders (24 cylinders possible by linking two units)

IGNITION POINT

Fully programmable for engine speed, load, temperature and fuel type.

TIMING MAPS

Ten, programmable to 4,000 RPM

IGNITION / FUEL CUT OFF REV LIMITS

Programmable to 4,000 RPM

SPARK ENERGY / DURATION

Full user control via fully programmable dwell time with automatic supply voltage compensation

INPUTS

TPS or MAP sensors for load mapping, Temperature, Fuel type and

Ignition inhibit / enable switch

OUTPUTS

Fuel valve drive, Tacho / Speed, On board visible status indicators

COMMUNICATIONS

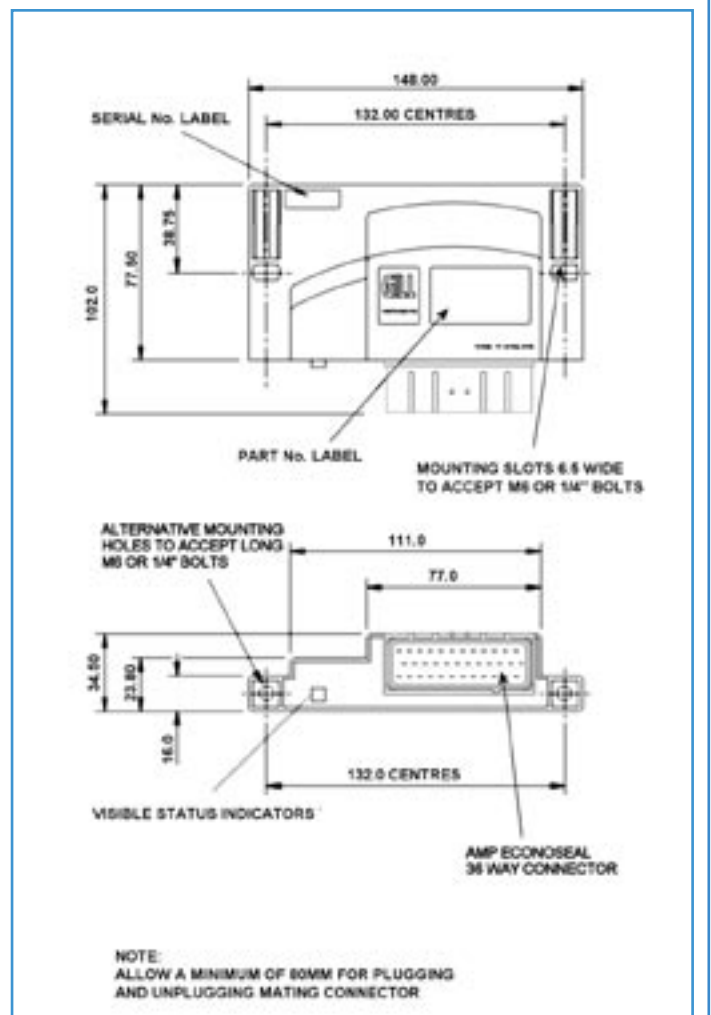
RS232, CANBUS

POWER SUPPLY

12V or 24V DC - automatically sensed

ENVIRONMENTAL

-40°C to +90°C, Sealed to IP67



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The Engine Control range is in continuous development and so the specification may be subject to change without prior notice



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