

THE LATEST GENERATION OF PROFORMANCE ENGINE MANAGEMENT



Single unit solution for 4-cylinder Direct Injection Aspirated and Turbo Charged Engines from OBR Control Systems

Euro-5 is a brand new, all-in-one ECU developed predominantly for use on 4-cylinder direct injection engines. The Euro-5 ECU has 4 on-board direct injection driver stages plus 4 additional injector drivers for combined port/direct fuel injection applications. The intuitive software allows for full programmability of injector voltages, current settings, plus current control of the high pressure fuel spill valve providing ultimate flexibility. Euro-5 can handle direct injection engines that feature either Bosch or Hitachi high pressure fuel pumps, driven off a camshaft with up to 4 pump lobes.

All our ECU's for motorsport are derived from OEM road car systems. This ensures they are built to the highest specifications required by today's high tech automotive industry. The knock on effect also means that the software strategies for drive-by-wire, variable camshaft timing, knock control, direct fuel injection and high pressure fuel control continuously deliver accurate and reliable functionality.

OBR's first installation on a direct fuel injection engine was almost 20 years ago. Ever since we have been supplying systems for direct injection engines within the automotive development, durability and testing sectors alongside on track motorsport activities.

Euro-5 features sync-less quick start from 1 or 2 crankshaft speed sensors. Cam and crank sensors can be VR or Hall effect type sensors and can support and control most types of modern ignition coils. Almost all standard OEM crank trigger patterns are supported, including the most common 60-2 tooth arrangement.

Furthermore, with its 128Mb on-board data logger memory capacity and 64 logged channel upper limit, it makes the Euro5 ECU one of the most versatile and robust aftermarket engine management solutions for direct injection racing engines available.

Special software/hardware encrypted versions are available. These can limit functionality and offer security to give total peace of mind for not only Championship organisers but other competitors as well.

APPLICATION

PowerPC family **Processor type Engine Layout** 4 cylinder N/A or turbo charged **Engine Type** Direct injection + Port injection **Control Strategy**

MAF, MAP or TPS **Injector Drivers** 4 x DI and 4 x port

Ignition Drivers 4 x power drivers plus 4 x logic drivers

Fuel Pump Control Bosch or Hitachi Lambda Sensor 1 x NTK UEGO **Knock Control** 2 channels Firing Order Programmable Data Exchange 3 x CAN ports

CAN plus 10/100 Mbit/s Ethernet Communication

Data Logging On-board 128 Mb Dimensions (mm) 177 x 165 x 36 Weight 825 grams

Features

- ASAP3 link and boost control with anti-lag
- Bosch and Hitachi pump control
- Programming of injector voltage and current levels
- Closed loop and self-learn lambda control
- Data import from Bosch and Teves ABS
- Drive-by-wire throttle control
- Gear dependent traction control with PID regulation
- · Knock control with 1 or 2 sensors
- Max RPM >15,000 RPM in DI mode
- Paddle shift control strategy
- · Variable camshaft timing VTEC for Honda engines
- 1 built-in barometric sensor
- 2 extra half bridge drivers
- 2 selectable crankshaft sensor inputs
- 5 selectable engine maps
- 19 digital sensor inputs (plus an additional 17 spare)
- 19 analogue sensor inputs

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