

Engine Control Unit MS 25 Sport



- ▶ 8 injection output stages
- ▶ For solenoid injectors
- ▶ 96 data inputs
- ▶ Software options available

The MS 25 Sport is an ECU for Diesel engines with up to 8 cylinders. It is developed for use with Bosch solenoid injectors. The MS 25 Sport utilizes a software development process based on MATLAB® & Simulink®.

The MS 25 Sport is able to operate in 12 V or 24 V systems. The base SW is able to control one hydraulic bank configuration with Fuel Metering Unit (FMU) and Pressure Control Valve (PCV).

Application

Engine layout	3, 4, 5, 6, 8, <3 on request
Injector type	Solenoid valve injectors
Control strategy	Quantity based
Hydraulic system	Fuel metering unit + Pressure control valve (2 bank optional)
Injection timing	2 pilot injections 1 main injection 2 post injections
Turbo boost control	Single or Bi-Turbo
Lambda measurement	Optional controls on request
Two bank hydraulic control	Optional
Traction control	Optional
Gear cut for sequential gearbox	Optional
Speed limiter	
Optional function packages available	
Calibration interface	CCP via CAN
Interface to Bosch Data Logging System	3 CAN interfaces

Max. vibration

Vibration Profile 1 (see Downloads or www.bosch-motorsport.com)

Technical Specifications

Mechanical Data

Aluminum product housing	Base plate with fluid cooling incl. pressure compensation element (PCE)
2 production type connectors with 192 pins	Separate coding each (192 x 1.2 mm pins)
Vibration damped circuit boards	Engine mountable with additional dampers
8 housing fixation points	
Size	260 x 250 x 81 mm
Protection classification	IP x 6k and IP x 9K
Weight	1,800 g
Temperature range	-40 to 85°C

Electrical Data

Power supply	12 or 24 V
1 internal atmospheric pressure sensor	
1 internal ECU temperature sensor for max. temperature	

Inputs

1 lambda interface LSU	LSU 4.9
7 general frequency inputs	4 wheel speed and one vehicle speed hall effect sensor inputs and 2 inductive turbo speed
1 input for inductive crankshaft sensor	Hall optional

1 input for Hall-effect cam-shaft sensor	Inductive optional
29 analog inputs	
14 digital inputs	

Sensor supplies and screens

3 sensor supply 5 V

Outputs

8 injection power stages	3 banks for 8 cylinders
2 Fuel Metering Unit (High Pressure Pump)	2 bank system optional
2 Pressure Control Valve (Rail)	2 bank system optional
12 power stages (low side)	
1 power stage for lambda heater	
2 H-bridges	

Software

RaceCon Calibration Software	free download
WinDarab Analysis Software	free download

Optional Functionality

Traction control SW upgrade
2 bank hydraulic control SW upgrade

Environment (not included)

Programming interface MS-ABox II	F02U.V00.327-03
Data logger C 70	F02U.V02.302-01
Display DDU 9	F02U.V02.300-02

Mating connectors (not included)

Mating connector I	F02U.V0U.147-01
CONNECTOR KIT; MS 25 SPORT - X1 (Vehicle)	
Mating connector II	F02U.V0U.148-01
CONNECTOR KIT; MS 25 SPORT - X2 (Engine)	

Communication

3 CAN interfaces (dash, application, customer use)	J1939 optional
1 LIN	Optional
1 SENT	Optional

Installation Notes

Depending on your experiences with calibration of Diesel ECUs we recommend calibration support from Bosch Motorsport.

Please remember that mating connectors and the programming interface MSA-Box II are not included and must be ordered separately.

Legal Restrictions

The sale of this product in Mexico is prohibited. Due to embargo restrictions, sale of this product in Russia, Belarus, Iran, Syria, and North Korea is prohibited.

Ordering Information

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