The MS 15.1 is an ECU for Diesel engines with up to 8 cylinders. It is developed for use with Bosch solenoid injectors.

**Application**

<table>
<thead>
<tr>
<th>Engine numbers supported:</th>
<th>3, 4, 5, 6, 8, &lt;3 on request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injector type</td>
<td>Solenoid injectors</td>
</tr>
<tr>
<td>Control strategy</td>
<td>Quantity based</td>
</tr>
<tr>
<td>Injection timing</td>
<td>2 pilot injections, 2 main injections, 1 post injection</td>
</tr>
<tr>
<td>Turbo boost control</td>
<td>Single or Bi-Turbo</td>
</tr>
<tr>
<td>Lambda measurement</td>
<td>Optional</td>
</tr>
<tr>
<td>Traction control</td>
<td>Optional</td>
</tr>
<tr>
<td>Gear cut for sequential gearbox</td>
<td></td>
</tr>
<tr>
<td>Speed limiter</td>
<td></td>
</tr>
<tr>
<td>Optional function packages available</td>
<td></td>
</tr>
<tr>
<td>Interface to Bosch Data Logging System</td>
<td></td>
</tr>
</tbody>
</table>

**Technical Specifications**

**Mechanical Data**

- Aluminum housing
- 4 connectors in motorsport technology with high pin density, 187 pins
- Vibration damped circuit boards

**Electrical Data**

- **8 housing fixation points**
- **Size**: 210 x 199 x 36 mm
- **Protection Classification**: IP67 to DIN 40050, Section 9, Issue 2008
- **Weight**: 1.780 g
- **Temperature range**: -20 to 85°C

**Inputs**

- 2 inputs for thermocouple exhaust gas temperature sensors
- 2 lambda interfaces LSU
- 4 inputs for wheel speed sensors; basic design for inductive sensors
- 4 inputs for turbo speed sensors; basic design for inductive sensors
- 1 input for inductive crankshaft sensor
- 1 input for Hall-effect camshaft sensor
- 3 system inputs 0 to 5 V
- 13 universal inputs 0 to 5 V, fixed pull-up
- 27 universal inputs 0 to 5 V, switchable pull-up
- 3 digital inputs

**Outputs**

- 8 injection power stages
- 12 power stages (low side)
- 2 power stages for lambda heater
- 2 H-bridges
- 2 sensor supplies 5 V/system use
3 sensor supplies 5 V/300 mA
3 sensor supplies 10 V/100 mA

**Software Tools**
- Modas Sport Calibration Software: Inclusive
- WinDarab Analysis Software: On request

**Optional Functionality**
- Traction control SW upgrade: F 02U V00 778-01
- Chassis SW upgrade: F 02U V00 779-01
- Two bank hydraulic control SW upgrade: F 02U V00 949-01

**Environment (not included)**
- Programming interface MSA-Box II: F 02U V00 327-03
- Data logger C 70: F 02U V02 302-01
- Display DDU 9: F 02U V02 300-02

**Mating Connectors (not included)**
- Mating Connector I: F 02U 000 466-01
- AS 6-16-35 SN
- Mating Connector II: F 02U 000 468-01
- AS 6-16-35 SB
- Mating Connector III: F 02U 000 469-01
- AS 6-16-35 SC
- Mating Connector IV: F 02U 000 445-01
- AS 6-12-35 SD

**Installation Notes**
- Inspection services recommended after 110 h or 1 year, internal battery to be replaced during service.
- Depending on your experiences with calibration of ECUs we recommend calibration support from Bosch Motorsport.
- Please remember that the mating connectors and the programming interface MSA-Box II are not included and must be ordered separately.

**Communication**
- 3 CAN interfaces (dash, application, customer use)
- 2 FireWire interfaces for external communication

**Ordering Information**
- **Engine Control Unit MS 15.1**
  Order number F 01T A20 022-01

**Software Options**
- **SW Upgrade Traction Control**
  Order number F 02U V00 778-01

- **SW Upgrade Chassis**
  Order number F 02U V00 779-01

- **SW Upgrade Two Bank Hydraulic Control**
  Order number F 02U V00 949-01