

Modular Sensor Interface M 60

www.bosch-motorsport.com



- ▶ Compact sensor interface
- ▶ 30 input channels
- ▶ Each channel individually configurable

The M 60 is a compact and light weight sensor interface unit for analog and digital sensors. Up to eight M 60 can be used to expand the number of input channels of the data logger C 60 as well as the display DDU 7. The M 60 are linked via high-speed Ethernet interface. This allows for synchronized acquisition of data from the different units and the ECU.

The M 60 offers 26 analog inputs, four rotational inputs, four pwm outputs and two independent CAN buses. Each analog input channel features an analog pre-filter, 8 x oversampling and highly linear digital filtering. The cut-off frequency of the digital filter is automatically adjusted to match the acquisition rate. The latency of the digital filters is corrected during recording, yielding zero filter delay in the recorded data. The evaluation of each M 60 measurement channel is individually configurable with the PC configuration tool RaceCon.

Application

8 kHz AD converters with digital low pass filter

Configurable math channels

User configurable CAN in/out messages

Max. 1,000 Hz acquisition rate for all channels

3-port network switch

RS232 GPS input

CCP-Master, data acquisition from ECU that support CAN calibration protocol (optional)

Technical Specifications

Mechanical Data

Size 105 x 34.5 x 137.5 mm

Weight 495 g

Operating temperature -20 to 65°C

Max. vibration Vibration Profile 1 (See Appendix or www.bosch-motorsport.com)

Electrical Data

Supply voltage 8 to 18 V

Max. power consumption (w/o loads) 10 W at 14 V

Inputs

Analog channels 26

Input range 0 to 5 V

Resolution 12 bit

Switchable pull up resistor	3 kΩ
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Rotational channels (default Hall, Inductive as option)	4
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Outputs

PWM outputs (low side switch 2 A each)	4
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Sensor supply 5 V (350 mA each)	4
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Sensor supply 10 V (350 mA each)	1
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Sensor supply 12 V (1 A, non regulated)	1
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Environment

Software Upgrade 1

CCP-Master (ASAP 2 file from ECU manufacturer required)	F 02U V01 012-01
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Connectors and Wires

Motorsport connectors double density	2 x 41 pins
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Mating connector I AS-DD 6-12-41SN	F 02U 002 216-01
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Mating connector II AS-DD 6-12-41SA	F 02U 004 180-01
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Installation Notes

Internal accumulator for data preservation and clock included

Required service interval: 24 months (internal accumulator is replaced)

Charge accumulator for > 6 h after installation.

Charge accumulator twice per year for > 6 h.

Send device to Bosch dealer for accumulator change.

The required software (.pst file) for this device is available in the download area of our homepage www.bosch-motorsport.com.

Communication

Configuration via RaceCon over Ethernet or MSA-Box II

CAN interfaces	2
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Ethernet 100BaseT	3
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Ordering Information

Modular Sensor Interface M 60

Order number **F 02U V00 882-02**

Software Options

SW Upgrade 1

Order number **F 02U V01 012-01**

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