

Modular Sensor Interface M 60



- ▶ 30 input channels
- ▶ Each channel individually configurable
- ▶ Compact dimensions

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 9. 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 kOhm
Rotational channels (default Hall, Inductive as option)	4

Outputs

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

Environment

Software Upgrade 1

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

Connectors and Wires

Motorsport connectors double density 2 x 41 pins

Mating connector I F 02U 002 216-01
ASDD612-41SN

Mating connector II F 02U 004 180-01
ASDD612-41SA

Installation Notes

Internal accumulator for data preservation and clock included

Inspection services recommended after 220 h or 2 years, internal battery to be replaced during service.

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

Ethernet 100BaseT 3

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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