

CAN Module EM-A6

6 analog Channels

The extended module EM-A6 measures up to 6 analog channels, converts the values to a 10 bit format and combines them to a CAN-Message. The module has a CAN-Interface (CAN2.0 B) which is used for transmitting the information from and to the module.

Weight and space required for the wiring harness can be reduced by daisy-chaining multiple extended modules because power and communication lines are routed through the device.



Application

Operating temperature range -20 °C ... 85 °C

Mechanical Data

Size 155 x 38 x 32.1 mm
 Weight 153 g
 Max. vibration *Vibration Profile 1*
 (see Appendix or www.bosch-motorsport.com)

Electrical Data

Power supply 10 V ... 18 V
 Supply current (without load) max. 80 mA
 ADC resolution 10 Bit (4.8 mV)
 Update rate 5 ms
 CAN speed 1 MBaud

Communication/Configuration Interface

CAN2.0 B, using interface MSA-Box II and RaceCon
 CAN-ID programmable via RaceCon
 Pull-ups switchable via RaceCon

Loom Side Connector

ASL606-05PN-HE red
 ASL606-05PD-HE green
 ASL606-05SN-HE red

Connector ASL206-05SN-HE (red); ANAx

Pin-No.	Function
1	UB_SG
2	AGND
3	ANA_INx
4	Vref50
5	N/C

Connector ASL206-05SD-HE (green), XOUT

Pin-No.	Function
1	UBATT
2	GND
3	CAN-High
4	CAN-Low
5	GND

Connector ASL206-05PN-HE (red), XIN

Pin-No.	Function
1	UBATT
2	GND
3	CAN-Low
4	CAN-High
5	GND

CAN Protocol

Byte order

Big endian (high-byte/low-byte, Motorola)

CAN Frame 1

Byte	0	1	2	3	4	5	6	7
Value	Row counter = 0	AD channel 1		AD channel 2		AD channel 3		unused

CAN Frame 2

Byte	0	1	2	3	4	5	6	7
Value	Row counter = 1	AD channel 4		AD channel 5		AD channel 6		unused

$$U [V] = \text{raw value} * 5 V / 1024$$

Application Hint

Please ask for compatibility of this CAN Module with your ECU.

Part Number

CAN Module EM-A6

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