

# AMA-1C0

Analogue acquisition module

### Description

The AMA-1C0 is a high specification analogue expansion module for use with Magneti Marelli data loggers and ECUs in car and motorbike applications.

The unit has 4 differential analogue inputs hardware configurable for K-type thermocouple or for other differential input and 8 single-ended at 12 bit resolution.

The module has a input sampling frequency software configurable up to 1 kHz using a configurable anti aliasing software filter.

### Main Features

- 8 Single-ended inputs @ 12 bit resolution
- 4 Differential inputs @ 12 bit for TC-K or pressure sensors
- 1 CAN communication bus
- 1 Flexray line
- Transmission data through CAN and Flexray line

### Benefits

- Floating point data management
- More inputs for ECU and Data Logger
- High precision
- Easy to use and configure
- Robust design and easy to install



### Typical Applications

Car and motorbike racing applications

## AUXILIARY MODULES

# AMA-1C0

Analogue acquisition module

### Technical Characteristics

#### Inputs

Single-ended (@ 12 bit resolution) .....	8
Differential (@ 12 bit resolution) .....	4
Digital .....	2
NTC internal temperature sensor.....	1
"Code Load" enable pin .....	1
Syncro (1 High frequency) .....	3

#### Outputs

Voltage references .....

Up to 3

#### Communications

CAN line (1 Mbit/s) .....	1
Flexray (10 Mbit/s) (2 wires) .....	1

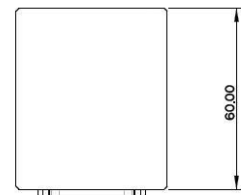
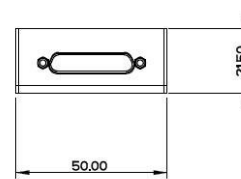
#### Logic Core

Microcontroller (130 MIPS RISC).....	1
Flash E2PROM (microcontroller).....	2 Mbyte
RAM memory (microcontroller).....	64 Kbyte

#### Other Characteristics

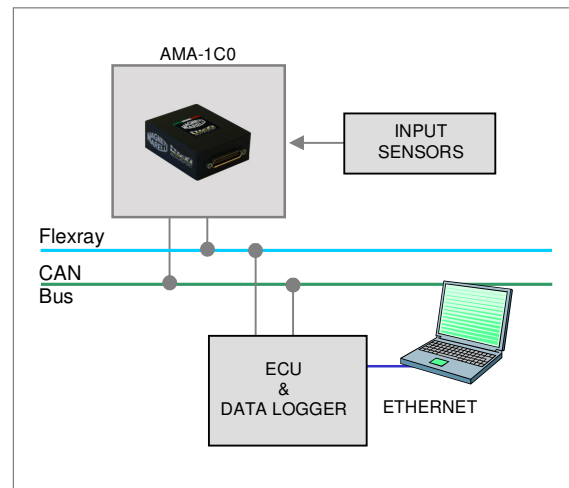
Power supply.....	8 to 16 V
Operating internal temperature.....	-20 to 85 °C
Electrical consumption without load (typ.).....	250 mA
Electrical consumption without load (max.).....	400 mA
Protection class.....	IP 54
Dimensions without connector .....	50 x 60 x 21.5 mm
Weight (approx.).....	85 g

### Dimensions



Dimensions in millimetres

### Application Schematics



For further information, please contact:



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