

AMG-1200

20 inputs acquisition module

Description

The AMG-1200 is a high specification analogue expansion module for use with Magneti Marelli data loggers and ECUs.

The unit has 4 differential analogue inputs with hardware gain for K-type thermocouple, 16 single-ended, 1 Pick-ups and 4 Hall effect. Data analysis is done with 10 and 12 bit A/D.

The module communicates over the CAN bus and has a sampling frequency up to 200 Hz for each of channels using a configurable software.

Main Features

- 12 Single ended @ 12 bit resolution
- 4 Single ended @ 10 bit resolution
- 4 Differential @ 12 bit resolution (selectable gain: 1 or 100)
- 1 Pick-ups or Hall effect
- 4 Hall effect
- 2 CAN communication buses
- Setup via Ethernet line

Benefits

- Floating point data management
- More inputs for ECU and Data Logger
- High precision
- ID customizable (using CAN PCMCIA)
- Easy to use and configure
- Robust design and easy to install



Typical Applications

Formula application
 Professional circuit and rally applications
 Race motorcycle application
 Touring car

AUXILIARY MODULES

AMG-1200

20 inputs acquisition module

Technical Characteristics

Inputs

Analogue Single-ended (@ 12 bit resolution)	12
Analogue Single-ended (@ 10 bit resolution)	4
Differential (*) (@ 12 bit resolution)	4
K-type thermocouple	2
NTC/PT1000 temperature sensor (selectable)	4
NTC internal temperature sensor	1
VR Pick-ups or Hall effect	1
Hall effect	4
"Code Load" enable pin	1
Syncro (Iso9141)	1

(*) Selectable gain: 1 or 100

Outputs

Voltage references	4
--------------------------	---

Communications

CAN line (1 Mbit/s (***))	2
Ethernet line (100 Mbit/s)	1

(***) Configurable on request

Logic Core

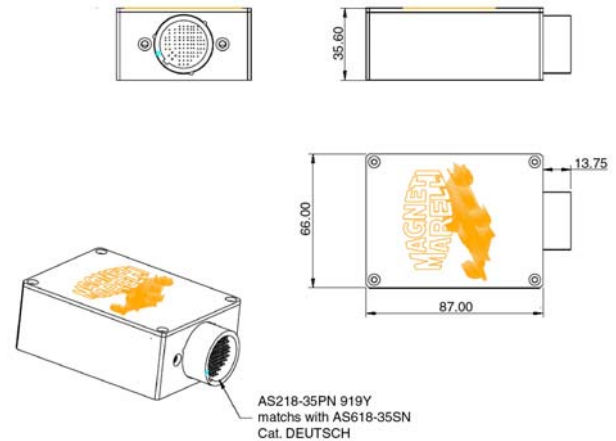
Microcontroller (80 MIPS RISC)	1
Flash E2PROM (microcontroller)	1 Mbyte
RAM memory (microcontroller)	48 Kbyte
RAM memory	512 Kbyte
E2PROM	4 Kbyte

Other Characteristics

Power supply	8 to 18 V
Operating temperature range (internal)	-40 to 85 °C
Temperature range during data download	0 to 70 °C
Protection class	IP 54

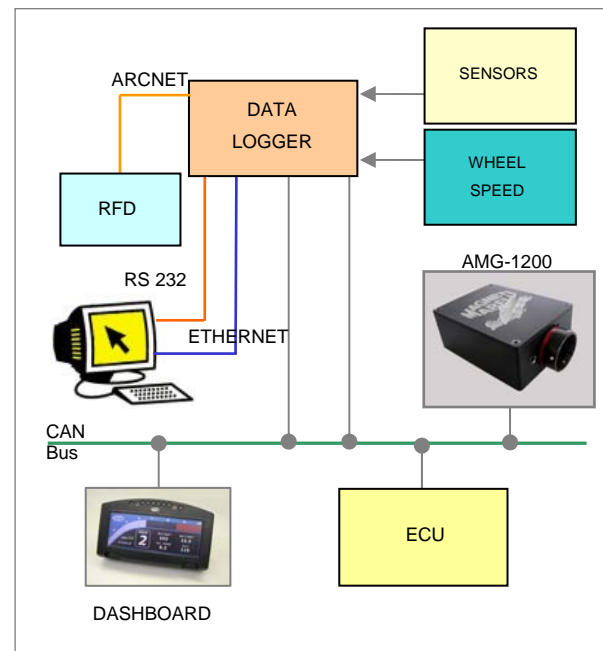
Dimensions without connector	66 x 87 x 35.6 mm
Weight (approx.)	230 g

Dimensions



Dimensions in millimetres

Application Schematics



For further information, please contact:



Magneti Marelli S.p.A.
Motorsport
Viale Aldo Borletti, 61/63
20011 Corbetta (Milano) Italy

Tel. +39 02 972 27 478
Fax +39 02 972 27 570
sales@magnetimarelli.com
http://www.magnetimarelli.com

November 2010
rel. 01
page 2 of 2