

HFD

High-performance racing data logger with flash card

Description

HFD is an evolution of Magneti Marelli data logger HRDL-1 and data are saved in an extractable Compact Flash Card.

Data download can be done, like for all Marelli data logger, by Ethernet or putting the Flash Card into PC.

HFD is intended to enhance the new Magneti Marelli data logger product range.

HFD is a versatile data acquisition unit developed for racing applications which require high resolution data from a large number of channels.

HFD is provided with analogue inputs including: Single-ended, differential, temperatures and K-type thermocouple.

Furthermore the device provides lap trigger and wheel speed inputs.

For further information or different solution, please contact our technical department.



Main Features

- 12 Single ended @ 12 bit resolution
- 4 Single ended @ 10 bit resolution
- 4 Differential @ 12 bit resolution (selectable gain: 1 or 100)
Configurable on request as Single ended (@ 12 bit resolution)
- 1 Pick-ups or Hall effect
- 4 Hall effect
- Up to 8 Gbyte logging memory (Compact Flash Card only)
- Up to 512 logged channels
- Up to 128 kbyte/s logging rate
- Sampling rates up to 1000 Hz
- 2 CAN communication buses
- 1 ARCNet line
- 1 Ethernet line

Benefits

- Removable flash card
- Data download via Flash Card or standard 100BaseT Ethernet
- Pin to Pin compatible with HRDL-1 logger
- Direct management of Marelli dashboard display
- Pick-ups inputs for wheel speed and distance measurement
- Requires Wintax4 analysis software (compatible Win2K/XP/Vista 32 bit/7)
- Requires Axon logging setup tool
- Very compact design
- Robust design, easy to install

Typical Applications

Professional circuit and rally applications

One make race series

Industrial application

Formula series

DATA LOGGER

HFD

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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
Lap trigger (**).....	1
"Code Load" enable pin	1
Syncro (Iso9141)	1

(*) Selectable gain: 1 or 100.

Configurable on request as Single ended (@ 12 bit resolution)

(**) Configurable on request

Outputs

Voltage references	4
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Communications

CAN line (1 Mbit/s (***).....	2
Ethernet line (100 Mbit/s)	1
ARCNet line (10 Mbit/s).....	1
RS 232	1

(***) Configurable on request

Logic Core

Microcontrollers Renesas SH7058	1
FRAM Ramtron FM25256.....	32 Kbyte
SRAM Renesas R1LV0416CSB.....	512 Kbyte
E2PROM.....	4 Kbyte
Time keeper	1

Logging

Compact Flash Card Sandisk CF5000 (****).....	8 Gbyte
Logged channels	up to 512
Logging rate	up to 128 Kbyte/s
Sampling rate	up to 1000 Hz

(****)Use only CF with "Data transfer rate" > 20 MB/s

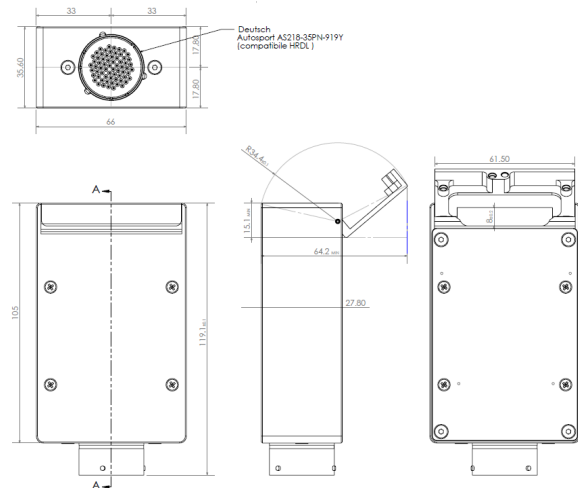
Other Characteristics

Power supply.....	8 to 18 V
Operating temperature range (internal).....	-25 to 85 °C
Temperature range during data download	0 to 70 °C
Protection class	IP 20

Dimensions

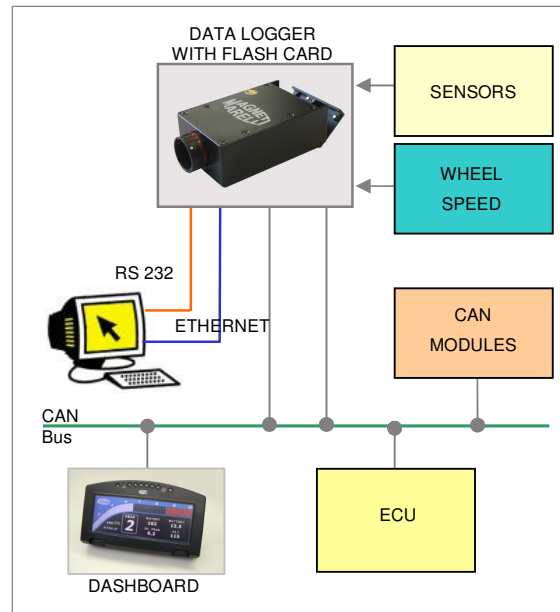
without connector	66 x 105 x 35.6 mm
with connector.....	66 x 119 x 35.6 mm
Weight (approx.).....	280 g

Dimensions



Dimensions in millimetres

Application Schematics



For further information, please contact:

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