

DATA DISPLAY

DDU 310-DL64/128

Dashboard with data logger
TFT color display

Description

The DDU 310-DL64/128 is a combined dashboard and input module for use either as a stand-alone display unit, or as an integral part of a complete data acquisition and monitoring system for use in the demanding environment found in motorsports vehicles.

The DDU 310-DL64/128 is equipped with a comprehensive range of analogue and digital inputs and ten-page liquid crystal display with configurable windows for an easily configured and personalised screen layout. A graphical bar indicator is typically used for representing engine revs.

A fast Ethernet bus is used for graphical layout load, channels' configuration and data download. As part of the Magneti Marelli data acquisition and telemetry system, the DDU 310-DL64/128 (with internal data logger) can communicate over a CAN network with a range of additional data loggers receiving and displaying data from the logger as well functioning as an additional input module.



Main Features

- 5 Single-ended
- 1 Pick-ups or Hall effect
- 3 Hall effect
- 64 or 128 Mbyte internal data logger
- Up to 128 logged channels
- Up to 48 Kbyte/s logging rate
- Sampling rates up to 1000 Hz
- Page and channel name labels
- Transmit internal diagnostic over CAN bus
- 48 alarm channels with programmable thresholds
- Display dedicated to 48 internal channels
- Lap time message displayed on dedicated page
- PC interface via Ethernet for loading graphical layout
- Easy to use and configure by Axon tool
- Designed for rugged applications

Benefits

- TFT 6.2" transfective dot matrix color display
- Graphical engine revolution counter with configurable non-linear scale
- Alarm condition displays channel name and value (with priorities for multiple alarms)
- Backlight regulation (8 steps)
- Inputs configurable to suit all sensors in the product range
- 2 push-button on the front panel for page selection, alarm level set, rpm/speed conversions, message hold time
- 6 high-brightness warning lights yellow/red for gear change (with programmable threshold) and 2 blue for general alarm condition indication
- 2 outputs for external warning lamps with short-circuit protections
- Floating point data management
- Pick-up inputs for wheel speed and distance measurement
- Requires Wintax4 analysis software (compatible Win2K/XP/Vista 32 bit/7)
- Requires Axon logging setup tool

Typical Applications

- MotoGP
- Professional circuit and rally applications
- One make race series
- Race motorcycle application
- Touring car

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Technical Characteristics

Inputs

Single-ended.....	5
NTC/PT1000 temperature sensor.....	2
NTC internal temperature sensor.....	1
VR Pick-ups or Hall effect (RPM).....	1
Hall effect (wheelspeed).....	3
On/Off digital (page scroll and confirm).....	2
Lap Trigger.....	2
"Code Load" enable pin.....	1

Outputs

Voltage references (@ 5 V).....	1
Low-side (@ 12 V).....	2
Shift Lamp (adjustable brightness).....	6
Alarm (adjustable brightness).....	2

Communications

CAN line (1 Mbit/s (*).....	2
Ethernet line (10/100base T).....	1
RS232.....	1

(*) Configurable on request

Logic Core

Microcontroller A (80 MIPS RISC).....	1
Microcontroller B (64 MIPS RISC).....	1
FPGA (50k gates).....	1
Graphic display controller.....	1
DPR.....	32 Kbyte
Flash E2PROM (microcontroller A).....	1 Mbyte
RAM memory (microcontroller A).....	48 Kbyte
Flash memory (microcontroller B).....	512 Kbyte
Ram memory (microcontroller B).....	4 Kbyte
Flash NV Ram.....	32 Mbyte
RAM memory.....	512 Kbyte
E2PROM.....	32 Kbyte
Time keeper.....	1

Logging

Flash disk memory.....	64 or 128 Mbyte
Logged channels.....	up to 128
Logging rate.....	up to 48 Kbyte/s
Sampling rate.....	up to 1000 Hz

Other Characteristics

Power supply.....	10 to 18 V
Operating internal temperature.....	0 to 60 °C
Protection class.....	IP 65
Transflective dot matrix color display.....	TFT 6.2"
Dimensions	

without connector.....	188 x 110 x 34.4 mm
with connector.....	188 x 110 x 59.2 mm
Weight (approx.).....	580 g

For further information, please contact:

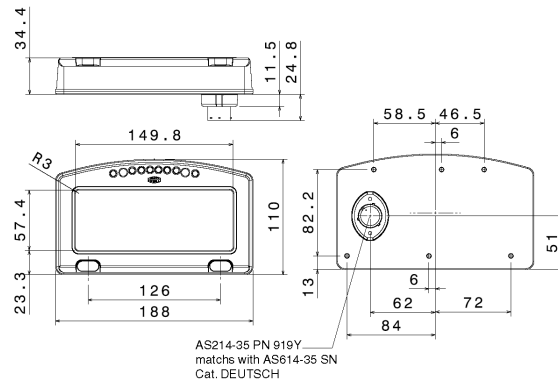


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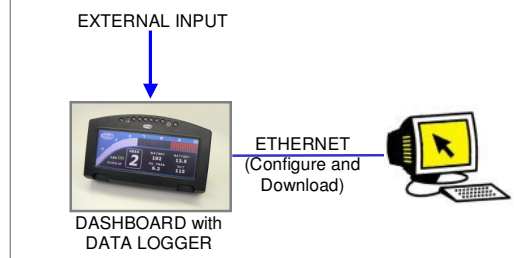
Dimensions



Dimensions in millimetres

Application Schematics

STAND-ALONE MODE



CAN COMMUNICATION MODE

