

## DATA LOGGER DL 4044 Light

**Monitor and record on your computer the fuel consumption, distance and speed for an accurate fuel economy profile of your engine or vehicle**

The Data Logger DL4044Light is an easy way to have your fuel economy data recorded on any standard PC. Hardware and software has been developed to make the installation very user friendly.

Made for testing purposes the DL4044Light can record any of the AIC Fuel flow meter with 80, 200, 800 or 2000 ppl. Distance and speed signal is directly connected to your Odometer and speed pulser in the vehicle and allows high frequency inputs.

### Application

- Any engines small, medium and large, truck, bus, building machine, tractor, generator, etc.

### Features and benefits

- **Unlimited data recording, as the documents is saved as a CSV document.**
- **Can be opened with any spreadsheet software.**
- Typically when opened on an MS Excel spreadsheet, 65536 lines can be stored, this makes out:
  - more than 18 hours continuous recording with a 1 second time period
  - more than 45 days continuous recording with a 60 seconds time period



888  
Instruktor

900  
Veritas

1000

4000  
Veritas

5000  
Fuel flow  
Master

6000  
Swissline

FS

Board  
Computer  
and  
Totalizer

Data  
Logger

EME Test according  
to 95/54/CE directives



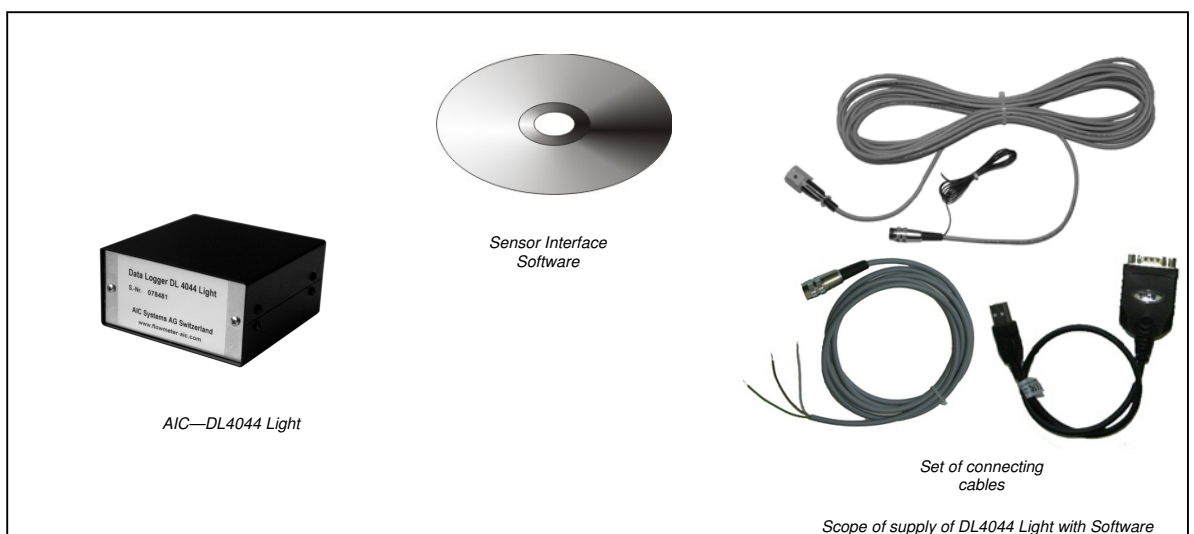
**AIC** SYSTEMS AG  
Switzerland

Automotive Information and Control Systems

## Measuring Systems

### A complete measuring systems consist of :

- data logger AIC DL4044 Light
- AIC fuel oil meter (any pulse output with max. 2000 ppl)
- second pulse output from the tachometer of the vehicle (can be left disconnected)
- Sensor Interface software from AIC Systems.
- Any computer or Laptop



## Measuring principle

This Data Logger + Software allows to pick-up and store in your computer an infinite databank of fuel consumed value according to the distance driven of the vehicle tested. Or allows you simply to have fuel recording data of your test. Values are read onto the internal pulse counter (2 galvanically separated inputs). These pulses are then read from the PC in real time according to your settings, and stored in a CSV file for further treatment.

### **Pulse rate input:**

The Data Logger DL4044 Light has **2 pulse rate inputs** preconfigured for fuel totalization and distance recording. These readings are then extrapolated into instantaneous fuel consumption and instantaneous speed. You can then decide how you want the data to be displayed.

## Technical data

### Ratings

The whole electronic module is designed using power saving technology. The computer is equipped with run control circuit so that even of serious problems in the vehicle power supply, the function of the computer is not affected. If the vehicle power supply is interrupted or switched off via the main switch, the stored measured values and initial settings are retained and stored in an EPROM and therefore not lost even if power is lost.

### General data

Manufacturer + configuration	AIC SYSTEMS AG
Suppliers	Hardware : AIC Systems AG

### Mechanical data

Dimensions (L W H)	110 x 105 x 50 mm
Weights	0.350 kg (without cables)
Temp.	- 35 to +75 °C

### Static Electrical Input

Voltage supply	11 - 28 VDC
Current consumption ( $U_{in} = 24$ VDC)	Max. 100 mA (all sensors connected)

### Fuel Pulse Input

Fuel sensor Input Voltage	Provided from DL4044 Light / $U = 12$ VDC
Input Current	Max. 40 mA
Frequency	< 100Hz
Trigger Levels	$V_{IL} = 1.0$ Vmax $V_{IH} = 2.4$ Vmin

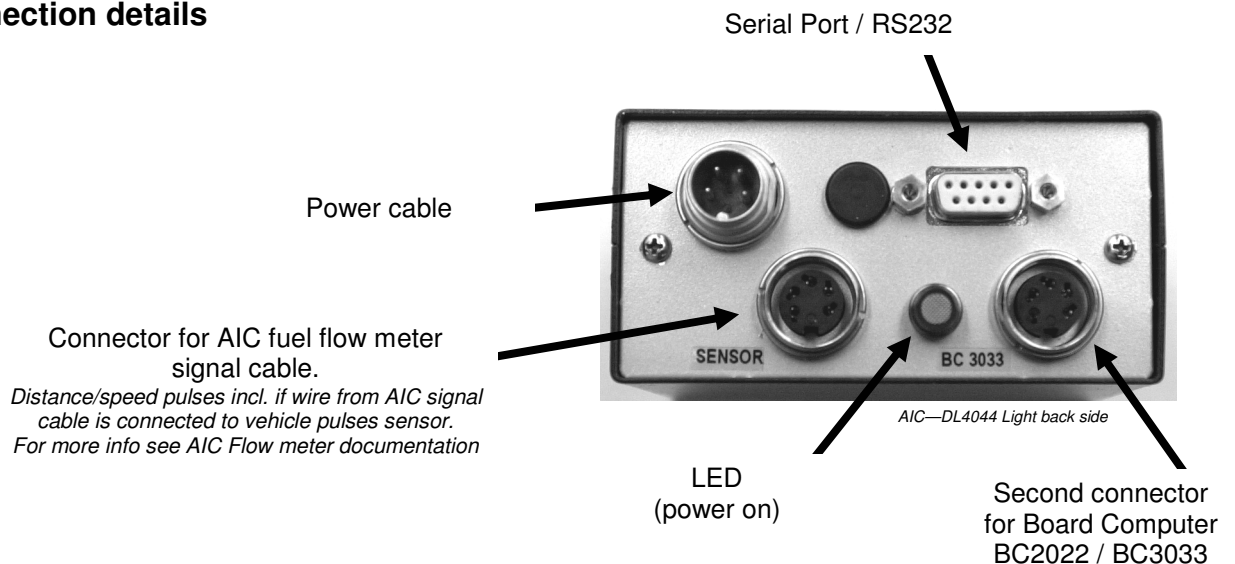
### Distance-Speed Pulse Input

Input Voltage	$U_{low} = 2.00$ V $U_{max} = 12.00$ V
Input Current	< 5 mA
Frequency	< 10 kHz

### Serial Ouput

Type	RS232 half duplex (non-isolated)
Baud rate	300 to 19.2 k
Data format	7/8 bits, odd, even, or no parity

## Connection details



## Ordering structure

<b>Model Type</b>	<b>Designation</b>	<b>Order code</b>
<b><u>Data Logger</u></b>		
DL4044 Light	Data Logger box, blind, for real time fuel consumption and distance - speed. Includes: - Power supply cable (2.5m) - RS232 - USB connection cable (0.3m) + Software	S4044L.00
<b><u>Accessories</u></b>		
Extension USB cable	1 m extension connection	5550.01
Double Connection Box	Split the fuel and distance - speed signals, allowing to connect DL 4044 Light and any other Board Computer or Totalizer	S1605.0
Power supply adapter	12 VDC, with cigarette lighter car connector $V_{out} : 15 - 24 \text{ VDC}$ $P_{max} = 120 \text{ W}$	1421.0
<b><u>Software</u></b>		
RecRead Software	AIC Systems recording and reading software for PC or Laptop with operating system Win 98, 2..., XP. Please see Technical Documentation RecRead Software ref. TI RecRead_e_09.07	SRS.00
<b><u>Spare Parts</u></b>		
Power supply cable	Power supply cable for BC2022 / 3033 / DL4044	5502.00
RS232 - USB cable	RS232 - USB adapting cable + Software	5550.00
Signal cable	Signal cable for AIC measuring instrument type 4000 / 1200 / 880 10 m length	5610.10

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