Technical Information

DATA LOGGER
DL 4045 Light

Monitor and record fuel consumption, distance and speed on your computer, smartphone or tablet using USB and / or Bluetooth communication.

Get an accurate fuel economy profile of your engine or vehicle.

888 Instruktor
900 Veritas
1000
4000 Veritas
5000 Fuel flow Master
6000 Swissline
FS
Board Computer and Totalizer
Data Logger

The Data Logger **DL 4045 Light** provides an easy way to have your fuel economy data recorded over USB and Bluetooth.

Hardware and software have been developed to make the installation very user friendly. Designed for testing purposes the **DL 4045 Light** can record the pulses delivered by any AIC Fuel flow meter with 80, 200, 804 or 2000 pulse per litre consumed. The distance/speed signal from your Odometer is directly connected to the distance/speed input of the device..

Equipped with USB and Bluetooth, the **DL 4045 Light** can communicate with two devices simultaneously, e.g. one tablet and one computer.

Application

- Any engine. Small, medium and large, truck, bus, construction equipment, tractor, generator, etc.
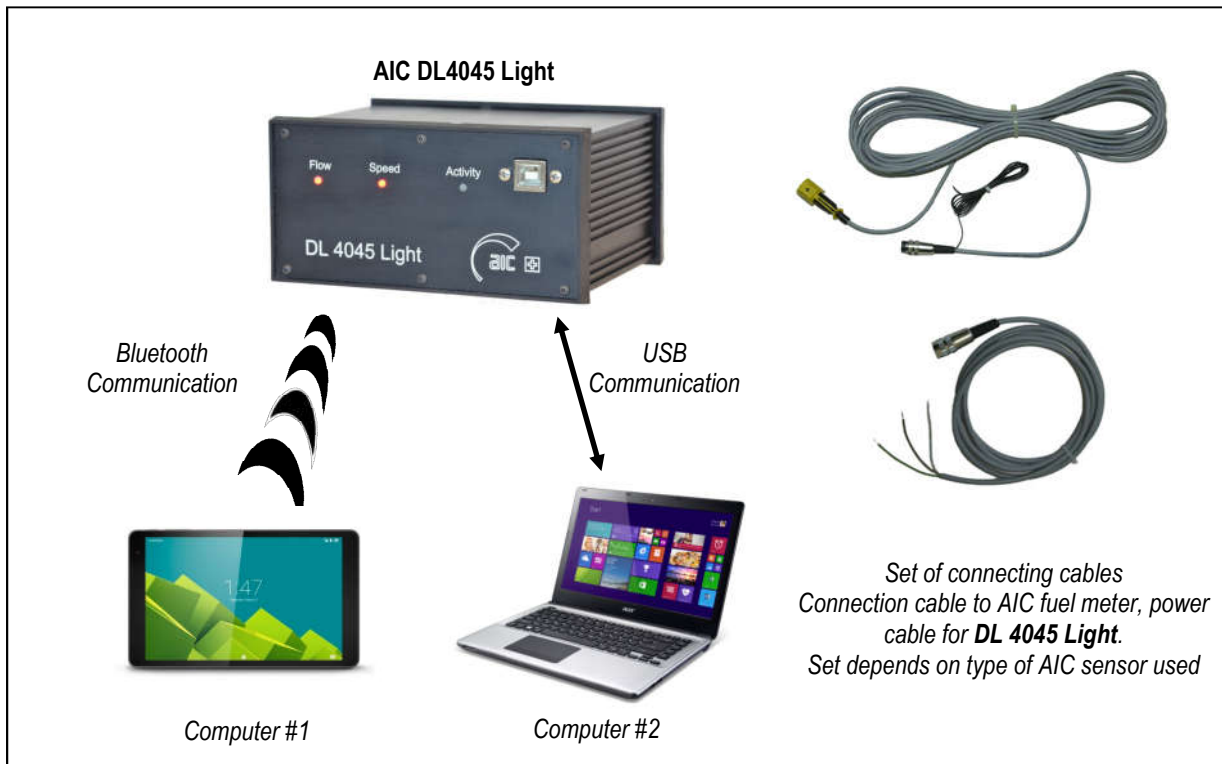
Features and benefits

- Almost unlimited data recording, as the data are saved in a CSV file.
- The CSV data file can be opened by any spreadsheet software.
- USB and Bluetooth connections can be used simultaneously.
- 20 meters Bluetooth range with the standard antenna (included)
- Up to 100 meters Bluetooth range, depending on the antenna and the Bluetooth sensitivity of the remote computer.

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Measuring Systems

A complete measuring system consists of :

- data logger **AIC DL4045 Light**
- AIC flowmeter (any model will work).
- Pulse output from the tachometer of the vehicle (can be left disconnected)
- Windows computer and/or Android Smarphone / Tablet equipped with the RecRead Software (sold separately).

AIC DL4045 Light

Bluetooth Communication

USB Communication

Computer #1

Computer #2

*Set of connecting cables
Connection cable to AIC fuel meter, power cable for **DL 4045 Light**.
Set depends on type of AIC sensor used*

Measuring principle

Directly connected to the AIC fuel consumption meter and vehicle odometer, the AIC **DL 4045 Light** together with the RecRead Software allows visualisation and recording of fuel consumption, speed and distance on a computer, smartphone ot tablet.

These consumption and distance pulses recording can be setup between 1 to 60 seconds or triggered with the space bar key.

Data are stored as CSV file for further treatment.

Pulse rate inputs:

The Data Logger **DL4045 Light** has **2 pulse rate inputs** preconfigured for total fuel consumption and distance recording. These readings are than extrapolated into instantaneous fuel consumption and instantaneous speed.

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Specifications

Comments	The **DL 4045 Light** uses technologies promoting energy conservation. The device is protected against possible electrical supply failures on the vehicle.

General	Manufacturer	AIC Systems AG—Switzerland
	Designation	**DL 4045 Light**

Mechanical	Dimensions (L x l x H)	120 x 140 x 70 mm
	Weight	0.400 Kg (without cables)
	Housing and faces	Aluminum

Power supply	Voltage range	11 - 28 VDC
	Consumption	< 2W (all sensors connected)
	Polarity inversion protection	Yes
	Over Voltage protection	Up to 40V

Consumption pulses input	Measuring cell power supply	Supplied by the DL 4045 / U = 9.0 VDC I = 100 mA Max.
	Signal Type	NPN
	Input current	< 1 mA
	Open circuit voltage	< 10 Vdc
	Input frequency	< 1 KHz
	Trigger thresholds	Vil = 1.0 Vmax Vih = 2.4 Vmin

Distance - speed pulses input	Signal Type	PNP
	Input current	< 1 mA
	Input voltage	< 40 Vdc
	Input frequency	< 10 KHz
	Trigger thresholds	Vil = 1.0 Vmax Vih = 2.4 Vmin

USB	Type	Full speed
	Connector	B Type
	Protocol	Proprietary

Bluetooth	Type	Class 1, bluetooth 2.1
	Antenna connector	SMA - **Use only an antenna provided by AIC Systems AG**
	Range in direct view	Up to 100m. Practical range depends on antenna type, setup and remote computer Bluetooth sensitivity
	Protocol	Proprietary

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Connection details

LED indicators for fuel flow (consumption)
Speed
Activity

USB connector

Bluetooth antenna connector

DL 4045 Light back side

DL 4045 Light front side

To AIC board
computer

Power input

AIC fuel sensor
input

Ordering structure

Designation	Description	Ordering N°
Data logger		
DL 4045 Light	Data acquisition device for real-time read out of fuel consumption, speed and distance with data recording on a third party computer. With USB and Bluetooth communication interfaces. A standard antenna is delivered with the device.	s4045L.00
Power cable	Power cable for BC 3034 and **DL 4045 Light**	5502.00
Connection cable data logger / board computer	Cable for connecting a BC 3034 (board computer) AIC with the **DL 4045 Light**	5640.00
Accessories		
Cigarette lighter power supply	Cigarette lighter plug for 12 - 24Vdc vehicles	1421.0
Bluetooth antenna medium	For signal range up to 50m ** in sight view, 3m cable	S4310.00
Bluetooth antenna Large	For signal range up to 100m ** in sight view.	Please consult
Software		
RecRead 2	Recording and data communication software for **DL 4045 Light** applications. Suitable for desktop computer, laptop or Tablet PC running Windows XP or higher	sRR2.00
RecRead for Android	Recording and data communication software for **DL 4045 Light** applications. Suitable for smartphones and tablets running Android 4.1 or higher.	sRRA.00
Options		
Cable 5610.10	Connexion cable for AIC fuel flowmeter type 4000 / 1200 / 880 - 10 meters	5610.10
Câble 5810.10	Connexion cable for AIC fuel flowmeter type 6000 - 10 meters	5810.10
USB cable	2 m USB connection for computer	5552.00

** depends on the setup and on the remote computer Bluetooth sensitivity

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