

J1939 Mini Logger™



Overview

The DAWN J1939 Mini Logger™ is a compact logger that acquires CAN bus data from heavy duty trucks and off-road-vehicles. It fits directly on the J1939 connector. The J1939 Mini Logger is part of the Mini Logger family of compact, low-cost, data loggers that acquire a variety of data from trucks and cars.

The J1939 standard defines almost 2000 parameters that could be on a vehicle's J1939 network. The companion [DawnEdit™ software](#) determines which parameters are available on the vehicle to create a unique database for each vehicle model. The user can select which parameters are acquired. Also, the user can add custom messages and parameters in DawnEdit to acquire proprietary messages.

Soft LED indicators show the logger status without distracting the driver. It has a real-time clock which the user can set to the local time zone. The Mini Logger includes a battery backup so the logger always knows the correct time.

The [DAWN Mini-Logger Video](#) demonstrates how to configure the logger and convert the messages to scaled, engineering parameters.

Standard Parameters

[List of J1939 parameters](#)

Some standard parameters need to be requested. The DAWN J1939 Mini Logger supports this function.

J1939 Mini Logger Specifications

Protocols

SAE J1939 CAN	Yes
SAE J1708/1587	Yes
No. of Protocol Ports (Channels)	One CAN channel and one for J1708.

Real-time PC data

Connections to PC	WiFi
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Stand-alone Logger

Store Messages	Yes. Convert to scaled engineering parameters as a post process
On-board Storage	Micro SD card 4GB standard. Up to 32GB allowed.
Auto Start-up	Yes
LEDs for status	RGB
Operating system	Proprietary RTOS
GPS (NMEA 0183)	Option. Internal to Mini Logger.
Wireless (Wi-Fi) or equivalent	Option. Internal to Mini Logger
Cellular modem	Option. Connects with WiFi or serial cable.
Wake-up Input	Yes
Real-time clock (RTC)	Yes

Analog Inputs

Cabin Temperature Sensor	Option
3-axis MEMS Accelerometer	Option
Expansion	Optional 8 channel ADAQ Mini Logger

Environment

Size (inches)	J1939 Connector: 1.5 Diameter x 2.3 Long
Size (mm)	38.1 Diameter x 58.4 Long
Supply Current:	80 mA. Up to 200mA with WiFi
Operating Temperature C	-40 to +70
Operating voltage	6 to 36V
Power Draw while sleeping	3 mA

<u>Warranty</u>	1 Year
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Data Storage & Transfer

The J1939 Mini Logger comes standard with a 4GB micro SD card. The card can be as large as 32GB. A USB/micro card reader is provided to manually transfer message files to a PC.

Automated Data Transfers with WiFi and Cellular

WiFi or cellular are options to automate the file transfers to a website. If you prefer to use an HEM Data website to store and display data [click here](#) for a description of features and benefits.

For details on the WiFi and cellular options [click here](#).

GPS

GPS data is an option for the J1939 Mini Logger. GPS Data syncs with vehicle data on conversion. [Click here](#) for details on GPS that is housed within the Mini Logger.

Stand-alone Data Logger or Real-Time Display

The DAWN J1939 Mini Logger™ works as a stand-alone data logger for convenient data storage without a PC: just plug the logger into the J1939 connector and it will start storing messages as soon as the ignition is turned on.

If you need real-time display of the data on a PC or smartphone, then you can also use the OBD Mini Logger as a pass-thru device. Contact HEM Data for details on real-time data with a PC, iPad or smartphone.

Analog Data

The ADAQ Mini Logger acquires analog data directly from sensors. This includes K type thermocouples, various voltage ranges and current measurements. The ADAQ Mini Logger works with the J1939 and OBD Mini Loggers. [Click here](#) for ADAQ Logger details.

Now Supports J1708

The DAWN J1939 Mini Logger™ now supports J1708. Take either simultaneously with J1939 or directly from the 6 pin J1708 connector. HEM Data provides an adapter cable between the 9 pin J1939 logger and the vehicle's 6 pin J1708 connector.

Future Enhancements

Check with HEM Data for availability for support of these future enhancements: Bluetooth and smartphone. info@hemdata.com

Options

Options include:

- [Internal GPS receiver and antenna](#)
- [Internal WiFi receiver and antenna](#)
- [Cellular](#)
- [J1708 adapter cable](#)
- [Water resistant sleeve](#)
- [DawnPlot](#)

Connectors



J1939 Mini Logger Pins J1939 Truck Adapter

Signal Name	Pin
Power	B
Ground	A
J1708 +	F
J1708 -	G
CAN HI	C
CAN LO	D
CAN Shield	E

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