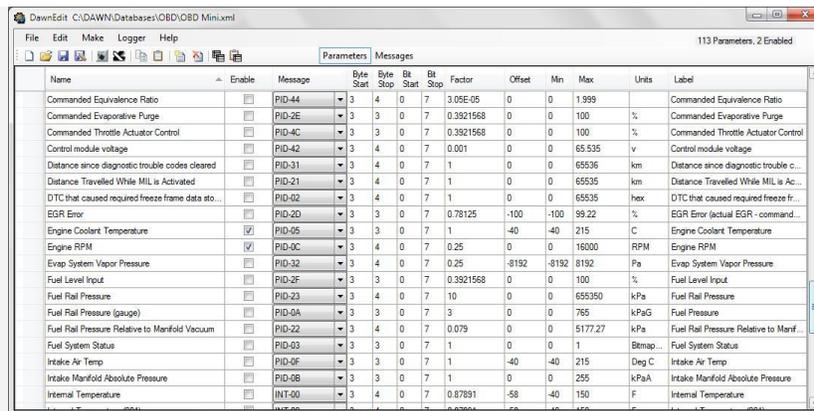


DAWN™ PC Software

DAWN™ (Data Acquisition With In-Vehicle Networks) is HEM Data's in-vehicle network data acquisition and analysis software and hardware solution to acquire data from cars, light, medium, and heavy duty trucks, and off-road vehicles.

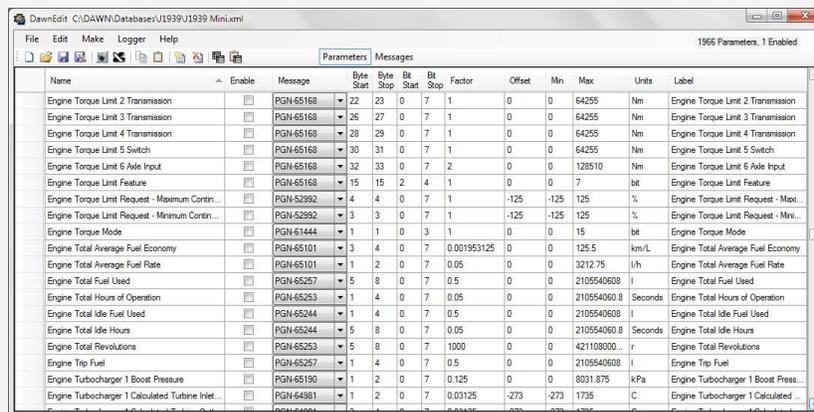
Use the DawnEdit™ database editor to configure and convert engineering parameters. Then use DawnPlot™ for display and analysis.

DawnEdit™



The screenshot shows the DawnEdit software interface with a table of 113 parameters. The table has columns for Name, Enable, Message, Byte Start, Byte Stop, Bit Start, Bit Stop, Factor, Offset, Min, Max, Units, and Label. Parameters listed include Commanded Equivalence Ratio, Commanded Evaporative Purge, Commanded Throttle Actuator Control, Control module voltage, Distance since diagnostic trouble codes cleared, Distance Travelled While MIL is Activated, DTC that caused required freeze frame data st..., EGR Error, Engine Coolant Temperature, Engine RPM, Evap System Vapor Pressure, Fuel Level Input, Fuel Rail Pressure, Fuel Rail Pressure (gauge), Fuel Rail Pressure Relative to Manifold Vacuum, Fuel System Status, Intake Air Temp, Intake Manifold Absolute Pressure, and Internal Temperature.

DAWN comes standard with a generic **OBD-II** database which defines almost 100 parameters according to the SAE J1979 standard; 40 being available on a typical car.



The screenshot shows the DawnEdit software interface with a table of 1966 parameters. The table has columns for Name, Enable, Message, Byte Start, Byte Stop, Bit Start, Bit Stop, Factor, Offset, Min, Max, Units, and Label. Parameters listed include Engine Torque Limit 2 Transmission, Engine Torque Limit 3 Transmission, Engine Torque Limit 4 Transmission, Engine Torque Limit 5 Switch, Engine Torque Limit 6 Aisle Input, Engine Torque Limit Feature, Engine Torque Limit Request - Maximum Contin..., Engine Torque Limit Request - Minimum Contin..., Engine Torque Mode, Engine Total Average Fuel Economy, Engine Total Average Fuel Rate, Engine Total Fuel Used, Engine Total Hours of Operation, Engine Total Idle Fuel Used, Engine Total Idle Hours, Engine Total Revolutions, Engine Trip Fuel, Engine Turbocharger 1 Boost Pressure, and Engine Turbocharger 1 Calculated Turbine Inlet...

The SAE **J1939** standard defines almost 2000 parameters; typically 150 to 400 parameters are available on a heavy duty truck.

DawnEdit will determine the parameters that are actually on your vehicle and builds a database for each vehicle model, so you only need to select the parameters of interest from a table.

After selecting the parameters to acquire and the sample rate, you would then create a configuration file and transfer it to the logger's microSD card.

DAWN imports proprietary DBC files for normal messages and CSV files or Access databases for Enhanced OBD (EOBD) and custom messages. HEM Data provides EOBD databases for various manufacturers as an option.

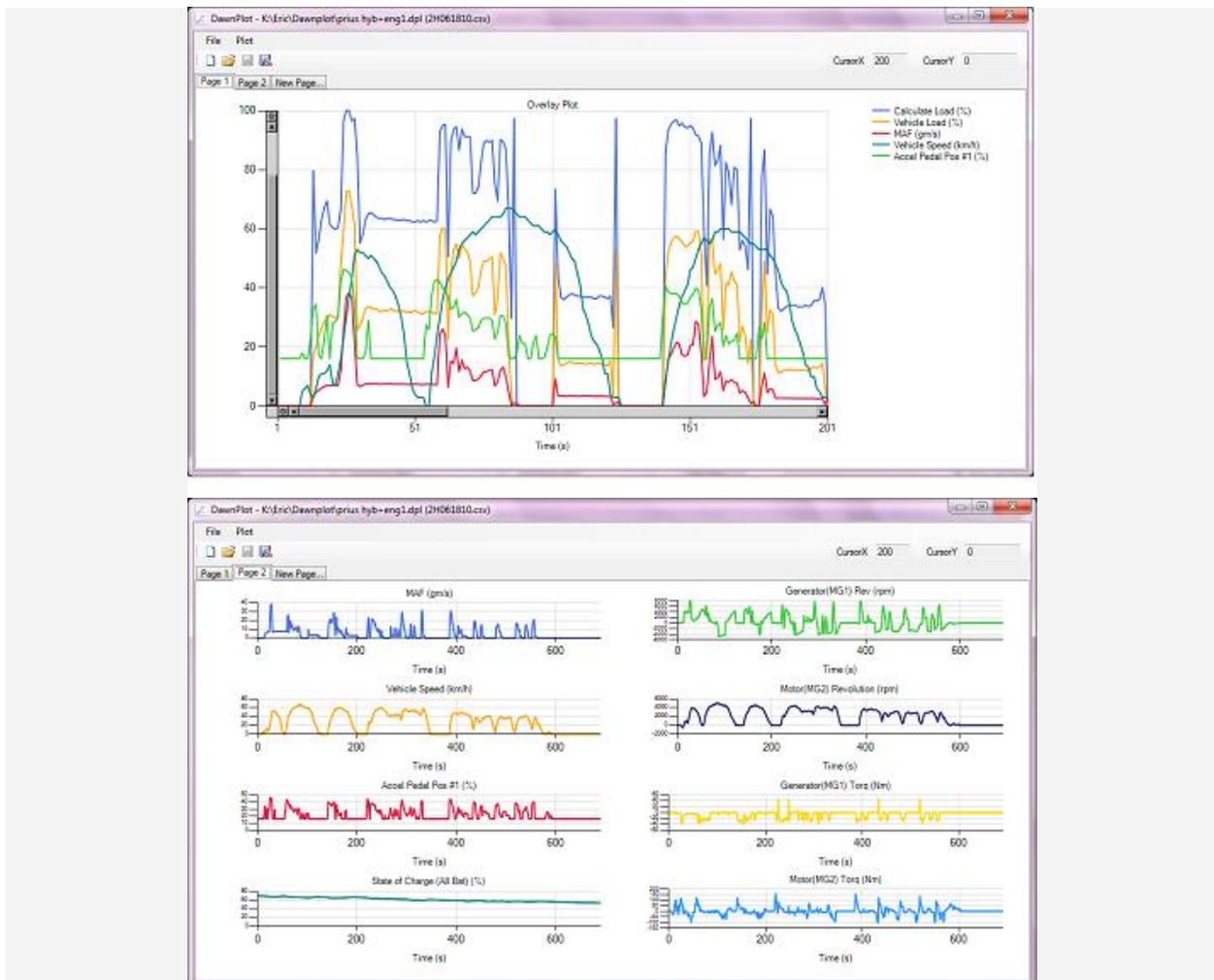
DawnEdit converts the message files stored on the logger to a CSV file containing scaled engineering parameters. Another option is to transfer message files to a website and have the website convert the message files to scaled, engineering parameters. [Click here for website details.](#)

Options include:

- appending trip files together or keeping them separate, and
- time can be shown as either relative time from the start of a trip or the absolute time of day.

DawnPlot™

DawnPlot™ is HEM Data's tool for plotting data files converted in DawnEdit. After converting binary files in DawnEdit, launch DawnPlot to plot the CSV files.



Ease of Use

Open any CSV file created by DawnEdit to instantly plot the data. The first four parameters are plotted on the first page. Create an unlimited number of plot pages with any combination of parameters on each page.

Features

Other DawnPlot features include cursors, drag zooming, multiple y-axis overplots and histograms. When using histograms, DawnPlot automatically determines the value ranges and plots the counts at nice round intervals.



More Hybrid Test Data

For more about DAWN and hybrid test data see [this page](#).

HEM Data Corporation

17320 Twelve Mile Road · Southfield, MI 48076

800.436.4330 · 248.559.5607