

Electronic Systems

KAntrak™ GEM SOFTWARE



AT A GLANCE

- Plug and go solution for the display of J1939 and J1587 transmitted engine and transmission data
- Compatible with most diesel engines
- Adjustable contrast and backlight
- ISO and SAE standard icons are used for the parameters
- Menu and text based alarm systems are in multiple languages
- Soft function tactile and audible push-keys
- Flexible display options: multi-window screens, with analogue gauge, digital text or graphics

The Generic Engine Monitor (GEM) is an extremely powerful and versatile piece of software that allows the user to connect the KAntrak™ 2700/2710 display directly to the J1939 or J1587 network on their vehicle or equipment. It displays comprehensive information on engine and transmission data, active and stored alarms (where supported), and is a trip and fuel computer.

The five soft keys located at the bottom of the display are used to easily navigate through intuitive menus to configure the display. The GEM offers user selectable icon based screen layouts as well as including a comprehensive multi language text based fault warning and acknowledgements system.

Single, Tri and Quad screen layouts are available, enabling several parameters to be monitored and displayed at any one time. Integrated memory is used for data logging the parameters being monitored, which can provide invaluable diagnostic information.

TYPICAL GEM DISPLAY SCREENS

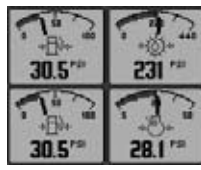
Tri-screen, analogue readout



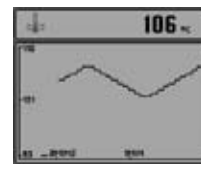
Quad screen digital



Quad screen analogue



Uni-screen, graph (history) readout



DISPLAYED DATA

IF RECEIVED FROM THE ENGINE AND TRANSMISSION ECU'S

TEMPERATURE

- Engine Coolant Temp
- Engine Intercooler Temp
- Engine Oil Temperature 1
- Transmission Oil Temperature
- Turbo Oil Temperature
- Fuel Temperature
- Intake Manifold 1 Temp
- Air Inlet Temp.
- Exhaust Gas Temp
- Auxiliary Temp 1
- Engine ECU Temp
- Exhaust Gas Port 1 Temp
- Exhaust Gas Port 2 Temp
- Turbo 1 Compressor Inlet Temp

PRESSURE

- Fuel Delivery Pressure
- Barometric Pressure
- Auxiliary Pressure 1
- Boost Pressure
- Air Inlet Pressure
- Air Filter 1 Differential Pressure
- Injector Metering Rail 1 Pressure
- Injector Metering Rail 2 Pressure
- Coolant Pressure
- Engine Oil Pressure
- Transmission Oil Pressure
- Clutch Pressure
- Air Start Pressure
- Injection Control Pressure

ELECTRICAL

- Electrical Potential
- Battery Potential Switched
- Net Battery Current
- Alternator Potential
- Alternator Current

FUEL

- Fuel Remaining
- Fuel Rate
- Instantaneous Fuel Economy
- Trip Fuel Economy
- Trip Fuel
- Trip Fuel Rate
- Total Fuel Used
- Fuel Leakage 1
- Fuel Leakage 2

SPEED

- Input Shaft Speed
- Output Shaft Speed
- Engine Speed
- Turbo 1 Speed
- Engine Desired Operating Speed
- Navigation Wheel based Vehicle Speed

PERCENTAGE

- Fuel Level
- Acceleration Position
- Throttle Position
- Engine Oil Level
- Coolant Level
- Estimated % Fan Speed
- Drivers Demand % Torque
- Actual Engine % Torque
- Torque Use at RPM

DISTANCE

- Distance Remaining
- Trip Distance
- Total Vehicle Distance

TIME

- Total Engine Hours
- Trip Engine Hours
- Service Hours

MISCELLANEOUS

- Torque Converter Lock-Up
- Current Gear
- Selected Gear
- CANTX Disable

FAULTS

SUSPECT PARAMETER NUMBER DISPLAYED WITH RELEVANT MESSAGE, SUCH AS TOO HIGH/TOO LOW

- Engine coolant pressure
- Accelerator Pedal Position
- Engine Load
- Fuel pressure
- Fuel level
- Water in fuel
- Engine Oil level
- Engine Oil filter differential pressure
- Engine Oil pressure
- Boost Pressure
- Intake manifold temperature
- Air inlet pressure

- Barometric pressure
- Engine coolant Temperature
- Coolant level
- Transmission oil pressure
- Crankcase pressure
- Battery voltage - switched
- Battery voltage - actual
- Exhaust temperature
- Fuel temperature
- Engine oil temperature
- Transmission oil temperature

- Fuel rate
- Engine speed
- Total Engine hours
- Total Fuel used
- Auxiliary Temperature #1
- Navigation Based Vehicle speed
- Engine speed sensor
- Timing Sensor
- ECU 8V DC Supply
- 5 Volt DC Supply
- Engine Fuel metering

PART NUMBERS

- GEM Software on a KAntrak™ 2700
- GEM Software on a KAntrak™ 2710

- 947030
- 948030

FEATURES:

- Data is available in multiple formats and measurement units
- Choice of 8 Languages:
 - English
 - French
 - German
 - Spanish
 - Portuguese
 - Italian
 - Swedish
 - Dutch
- Engine and transmission fault data is handled by a user warning and acknowledgement system
- Comprehensive fuel management and trip computer facilities
- Automatic last screen store and a keyboard lock
- Engineering screens are available such as Comms and Message Database viewers
- Alarm data and engine source filtering are user selectable. If supported by the ECU engine configuration data can be viewed
- Users are able to specify the engine service interval prompt and also the fuel tank capacity for fuel and distance calculations
- The KAntrak™ displays offer proven high levels of electrical, environmental and mechanical performance in tough applications
- Customized splash screens available
- Settings can be locked using PIN code.

