



## INTELLIGENT MONITORING SYSTEMS

### CANtrak DISPLAYS AND GENERIC ENGINE MONITORING SOFTWARE FOR J1939 / J1587 ENGINES

The latest version of the Generic Engine Monitor (GEM) software displays transmitted J1939 and J1587 engine and transmission data, active and stored alarms where supported, and is a trip and fuel computer. The GEM application runs on the renowned CANtrak 2600/2610 robust industrial graphical displays.

The GEM offers user selectable icon based display layouts as well as including a comprehensive multi language text based fault warning and acknowledgement system.

#### KEY FEATURE CHANGES AND UPGRADES

- Enhanced Fuel Computer Operation
- SAE J1587 Legacy Protocol added
- Tri-Screen now is configurable - similar to the Quad-Screens
- Configuration Menu now has optional PIN - Personal Identification Number to lock other users out from making Config Menu changes
- Quad-Screens can now be "locked" to prevent unauthorized changes
- SAE 1939 Source Addressing has greater configurability
- Service Interval counter/display can now be disabled
- The DM1 message - "No Active Faults" no longer triggers an alarm
- Many new parameters added

#### AT A GLANCE

- Plug-and-go solution for the display of J1939 and J1587-transmitted engine and transmission data.
- Compatible with most diesel engines and transmissions.
- Large sunlight readable graphical display, 160 x 128 pixels.
- 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 graphs.
- Data is available in several formats and measurement units.
- Engine and transmission fault data is handled by a user warning and acknowledgement system.
- Comprehensive fuel management and trip computer facilities.

## Typical GEM display screens

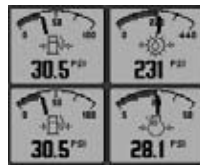
Tri-screen, analogue readout



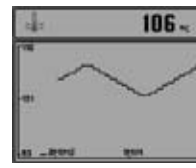
Quad screen digital



Quad screen analogue



Uni-screen, graph (history) readout



### DISPLAYED DATA IF RECEIVED FROM THE ENGINE AND TRANSMISSION ECU'S

#### 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

#### DISTANCE

Distance Remaining  
Trip Distance  
Total Vehicle Distance

#### 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

#### TEMPERATURE

Engine Coolant Temp  
Engine Intercooler Temp  
Engine Coolant Temp

#### PART NO.S

GEM Software on a CANtrak 2600	917030
GEM Software on a CANtrak 2610	918030

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

#### 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

#### SPEED

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

#### TIME

Total Engine Hours  
Trip Engine Hours  
Service Hours

#### MISCELLANEOUS

Torque Convertor Lock-Up Engaged  
Current Gear  
Selected Gear  
CANTX Disable

### FAULTS (SUSPECT PARAMETER NUMBER) AVAILABLE 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

### FEATURES:

- Automatic last screen store and a keyboard lock.
- A number of 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 to empty calculations.
- Electrical connection to data and power lines is via a sealed Deutsch 12 way connector.
- All CANtrak Displays use a robust, polycarbonate case that can be front mounted or on certain modules rear (flush) mounted into a panel aperture.
- The CANtrak displays offer proven high levels of electrical, environmental and mechanical performance in tough application
- GEM software can be fully customised to meet exact requirements. From adding customised logos to additional parameters and screen formats for example.
- Each CANtrak shipped with GEM software includes a comprehensive User Manual and a Front Mounting Kit.

