

CANvu™ Industrial Engine Monitors



Features

The CANtronik Engine Monitor (EM) range enables display of critical engine data via colour and monochrome rugged displays suitable for agricultural, construction and industrial applications, allowing you flexibility both in terms of choice of model and budget.

The CANvu™ Engine Monitoring Software receives and displays J1939 engine and transmission data, including common Tier4 parameters, with active alarms (from DM1), where supported.

The EM software includes typical functions used in industry, offering user selectable icon based display layouts; including a comprehensive multi language text based fault warning and acknowledgement system.

The range also includes models capable of connecting to Mechanical engines as well as Electronic.

KEY FEATURES

- Compatible with virtually any Engine Type or Sensor
- Full J1939 DM1 message centre & parameters
- Screens can be “locked” to prevent changes
- Service Interval Timer Alarm
- Supports and displays TIER4 engine information
- Supports Telematics

Highlights

- Plug-and-go solution for the display of J1939 & Tier4 transmitted engine and transmission data
- Compatible with most diesel engines and transmissions
- Output available for external alarm
- White label customisation & range of screen sizes and monochrome/colour options available
- Rugged displays with ‘low profile’ model available
- Adjustable backlight for display and keys
- ISO and SAE standard icons are used for the parameters
- Menu and text based alarm systems in multiple languages
- Soft-function tactile and audible push-keys
- Flexible display options, multi-window screens, with analogue gauge, digital text and colour bars
- Data is available in several formats and measurement units
- Engine and transmission fault data is handled by a user warning and acknowledgement system
- Automatic last screen store and a keyboard lock

Engine Monitor Comparison

	CANvu™ 230 EM	CANvu™ 260 EM	CANvu™ 355 Full IEM	CANvu™ 355 Lite IEM	CANvu™ 700 IEM
T4 Compliant	✓	✓	✓	✓	✓
Screen Size	2.3" LCD	4.3" LCD	3.5" LCD	3.5" LCD	7.0" LCD
Screen Resolution	128x64	160x128	320x240	320x240	800x480
Data Types / Sources					
J1939	✓	✓	✓	✓	✓
J1587	-	✓	-	-	-
NMEA 2000	-	-	-	-	-
Analogue Senders	Fuel Level	-	7 + TACH	-	14 + TACH
Gateway	-	-	-	-	-
GPS (RS232)	-	✓	✓	✓	✓
External Alarm	✓	-	✓	-	✓
Diagnostics					
J1939 DM1	✓	✓	✓	✓	✓
J1939 DM2	✓	-	✓	✓	✓
CAN Logger	-	-	✓	✓	✓
CAN Viewer	-	✓	✓	✓	✓
Hardware					
CPU / MCU	ARM Cortex	Siemens	Freescale iMX	Freescale iMX	Freescale
FLASH Memory	256K	512K	128Mb	128Mb	128Mb
SDRAM	96K	128K	128Mb	128Mb	128Mb
Display / Electrical					
Languages Supported	4	6	8	8	8
Screen Active Area (mm)	48.62x23.66	80x64	70.08x52.56	70.08x52.56	152.4x91.44
No. of Colours	Mono	Mono	64K	64K	262K
Contrast Ratio	N/A	N/A	300:1	300:1	400:1
Backlight	N/A	N/A	750 NIT	750 NIT	800 NIT
Power Requirements	10-32v	10-32v	10-32v	10-32v	10-32v
Connection					
Deutsch Ports	1 x 6 pin	1 x 12 pin	2 x 12 pin	1 x 12 pin	3 x 12 pin
USB Ports	1 x Mini	-	1 x Type A	1 x Type A	2 x Type A
Communications					
CANbus Ports	1	1	2	1	2
RS232	-	✓	✓	✓	✓
Environmental / Mechanical					
Operating Temp	-30 to +80°C	-25 to +75°C	-20 to +70°C	-40 to +70°C	-30 to +80°C
Storage Temp	-40 to +80°C	-40 to +80°C	-30 to +80°C	-40 to +80°C	-40 to +80°C
Dimensions (mm)	79.5 x 69.4	110 x 110	95 x 95	95 x 95	205 x 157

Typical Monochrome Screens



Highlights

- > Alarm data and engine source filtering are user selectable. If supported by the ECU engine configuration data can be viewed
- > A number of Engineering screens are available such as Comms and Message Database Viewers
- > Electrical connection to data and power lines is via sealed Deutsch connectors
- > All CANvu™ displays use a robust, polycarbonate case that can be front mounted or on certain modules rear (flush) mounted into a panel aperture
- > The CANvu™ displays offer proven high levels of electrical, environmental and mechanical performance in tough application

Typical Colour Screens



> Data Parameters

Displayed Data If Received from the Engine and Transmission		Faults (Suspect Parameter Number) Available With Relevant Message Such As Too High/Low
ELECTRICAL	MISCELLANEOUS	5 Volt DC Supply Accelerator Pedal Position Air Inlet Pressure Auxiliary Temperature #1 Barometric Pressure Battery Voltage - Actual Battery Voltage - Switched Boost Pressure Coolant Level Crankcase Pressure ECU 8V DC Supply Engine Coolant Engine Coolant Pressure Engine Fuel Metering Engine Load Engine Oil Filter Differential Pressure Engine Oil Level Engine Oil Pressure Engine Oil Temperature Engine Speed Engine Speed Sensor Exhaust Temperature Fuel Level Fuel Pressure Fuel Rate Fuel Temperature Intake Manifold Temperature Navigation Based Vehicle Speed Temperature Timing Sensor Total Engine Hours Total Fuel Used Transmission Oil Pressure Transmission Oil Temperature Water In Fuel
Alternator Current Alternator Potential Battery Potential Switched Electrical Potential Net Battery Current	CANTX Disable Current Gear Selected Gear Torque Converter Lock-Up Engaged	
FUEL	PERCENTAGE	
Fuel Leakage 1 & 2 Fuel Rate Fuel Remaining Instantaneous Fuel Economy Total Fuel Used Trip Fuel Economy Trip Fuel Rate	Acceleration Position Actual Engine % Torque Coolant Level Drivers Demand % Torque Engine Oil Level Estimated % Fan Speed Fuel Level Throttle Position Torque Use at RPM	
PRESSURE	SPEED	
Air Filter 1 Differential Pressure Air Inlet Pressure & Air Start Pressure Auxiliary Pressure 1 Barometric Pressure Boost Pressure Engine Oil Pressure Fuel Delivery Pressure Injection Control Pressure Injector Metering Rail 1 Pressure Coolant Pressure Pressure Injector Metering Rail 2 Transmission Oil Pressure Clutch Pressure	Engine Desired Operating Speed Engine Speed Input Shaft Speed Navigation Wheel based Vehicle Speed Output Shaft Speed Turbo 1 Speed	
	TIME	
	Total Engine Hours Trip Engine Hours Service Hours	
TEMPERATURE		
Air Inlet Temp Auxiliary Temp 1 Engine Coolant Temp Engine ECU Temp Engine Intercooler Temp Engine Oil Temp 1 Exhaust Gas Port 1 & 2 Temp	Exhaust Gas Temp Fuel Temp Intake Manifold 1 Temp Transmission Oil Temp Turbo 1 Compressor Inlet Temp Turbo Oil Temp	