DSEControl®

DSEE050

eView® Engine Display - Configurable Engine Monitoring

KEY FEATURES

- Fully configurable display colours
- Adjustable display icons
- Digital / analogue I/O mapping to icons
- TSC 1 speed control via push buttons or onboard inputs
- Configurable displayed units
- SPN ignore list
- Configurable speed step size & ramp
- 3.5” 320 x 240 pixel optically bonded TFT display.
- 4 configurable multi-functional inputs (digital, current, voltage, resistance).
- 3 outputs for external relays, LEDs and audible buzzer.
- 80 mm circular panel cutout for simple replacement of traditional gauges.
- IP67 rating offers increased resistance to water ingress.
- 120 Ω resistor software switchable.
- Auto on/off heated display.
- Industry standard Deutsch 18 pin connector.
- Monitors engine speed, oil pressure, coolant temperature, fuel level & more.
- Compatible with Tier 4 Final and Stage V engine parameters.
- TSC 1 messaging for speed control.
- DTCs for the display of DM1 and DM2 diagnostic trouble codes.
- Configurable CAN baud rate (250 kbit/s or 500 kbit/s).
- Configurable start-up screen and instrumentation pages.
- Dark and light screen themes.
- Five backlit soft navigation keys.
- Customised image display (30 screen support).
- Low power/power save mode.
- PC configurable using DSE Configuration Suite Software.

KEY BENEFITS

- High resolution display provides excellent readability.
- Heated display for continual operation in extreme cold temperatures.
- Licence-free PC software.
- Uses DSE Configuration Suite PC Software for simplified configuration
- User friendly set-up and soft-key navigation for ease of use.
- Compatible with a wide range of CAN engines.

SPECIFICATIONS

DC SUPPLY

CONTINUOUS VOLTAGE RATING
8 V to 35 V continuous
(5 V for up to 1 minute)

CRANKING DROPOUTS
Able to survive 0 V for 100 mS, providing supply was at least 10 V before dropout and supply recovers to 5 V. This is achieved without the need for internal batteries.

MAXIMUM OPERATING CURRENT
300 mA at 12 V, 150 mA at 24 V

MAXIMUM STANDBY CURRENT
80 mA at 12 V, 44 mA at 24 V

INPUTS

MULTI-FUNCTIONAL INPUTS A to D
Configurable as: digital, current, voltage, resistance
0 V to 10 V
0 mA to 20 mA
0-3 kΩ

OUTPUTS

DC OUTPUTS A to C
1 A continuous at supply voltage

VREF OUT
100 mA at 10 V / 5 V

OPERATING TEMPERATURE RANGE
-40 ° C to +85 ° C
-40 ° F to +185 ° F

HEATED DISPLAY OPERATING RANGE
Turns on at -25 ° C / -13 ° F
Turns off at -5° C / 23 ° F

STORAGE TEMPERATURE RANGE
-40 ° C to +85 ° C
-40 ° F to +185 ° F

DIMENSIONS

OVERALL (W x H x D)
112.5 mm x 115 mm x 49 mm
4.43” x 4.53” x 1.93”

PANEL CUTOUT
80 mm / 3.15” Diameter

RELATED MATERIALS

TITLE	PART NO.
DSEE050 Operators Manual	057-300
DSEE050 Configuration Suite PC Software Manual	057-299
DSEE050 Installation Instructions	053-242

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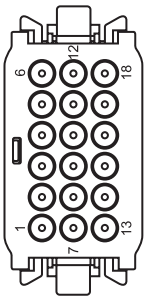
eView® Engine Display - Configurable Engine Monitoring

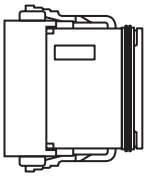
The DSEE050 is a fully configurable colour engine display and controller designed to meet the demands of modern electronic engines and equipment applications.

The DSEE050 supports J1939 electronic engines, including Tier 4F and stage V engine parameters and supports TSC 1 messaging allowing speed control messages to be sent over CAN.

The engine display is an extremely powerful and versatile product suited to a wide number of different application environments.
The DSEE050 is fully configurable using the DSE Configuration Suite Software, which allows users to create custom configurations and user interface screens.

Users can also add company branding to the display's start-up screen and select from a light and dark background when the module is in use.





18 Pin Deutsch Connector

PIN	DESCRIPTION
1	GND
2	CAN Screen
3	CAN L IN
4	CAN H IN
5	Input 4
6	Input 1
7	VDC Batt +
8	CAN Screen
9	CAN L Out
10	CAN H Out
11	GND
12	Input 2
13	GND Batt
14	Output 1
15	Output 2
16	Output 3
17	VREF Out
18	Input 3

ENVIRONMENTAL TESTING STANDARDS

ELECTRO MAGNETIC COMPATIBILITY
BS EN 6100-6-2
Electromagnetic Compatibility (EMC) Noise Immunity

BS EN 6100-6-4
Electromagnetic Compatibility (EMC) Emission Standard

ISO 11452
Electromagnetic Compatibility - Road Vehicles

ISO 7637-3: 2016
Road Vehicles - Electrical disturbances from conduction and coupling
Part 3: Electrical transient transmission by capacitive and inductive coupling via lines other than supply lines

ELECTRICAL SAFETY
BS EN 61010
Safety Requirements for Electrical Equipment for Measurement, Control & Laboratory Use.

BS EN 61010: 2010
Part 1: General Requirements

BS EN 61010-2-030: 2010
Part 2-030: Particular Requirements for Testing Measuring Circuits

ELECTRICAL TESTS
ISO 16750-2: 2012
Road vechicles - Environmental conditions and testing for electrical and electronic equipment.
Part 2: Electrical loads
4.6.3 Starting profile
4.6.4 Load dump

CLIMATIC TESTS
EN 60068-2-30
Damp heat, cyclic upper temperature 55 ˚C

EN 60068-2-78
Damp heat, steady state test temperature 40 ˚C/93 % RH (21 Day Duration)

MECHANICAL TESTS
EN 60068-2-6
Part 2-6: Tests - Test Fc: Vibration (sinusoidal)

EN 60068-2-27
Part 2-27: Tests - Test Ea: Shock

TEMPERATURE
BS EN 60068-2-1
Ab/Ae Cold Test -40 °C (-40 °F)

BS EN 60068-2-2
Bb/Be Dry Heat +85 °C (185 °F)

CHEMICAL
ISO 16750-5
Chemical testing for electrical and electronic equipment - Road Vechicles

DEGREES OF PROTECTION PROVIDED BY ENCLOSURES
BS EN 60529
IP67/NEMA 6.

RELATED PARTS

TITLE	PART NO.
DT16 Connector Complete With Pins	007-850
DT16 Connector Harness	016-176
DT16 Programming Connector Harness	016-177
USB-CAN Programming Interface (PCAN - USB - IPEH - 002022)	016-179

LISTED