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CAV13 : Rotax iS Series Engine Status Monitor

Displays information and status data from Rotax 912iS and 915iS ECUs.

Provides full descriptions of any warnings or errors.

Applications

- Rotax 912iS / 915iS engine installations.

Features and Benefits

- Fits a standard 57mm instrument hole (requires 82mm x 63mm x 31(d)mm behind panel).
- OLED display matches popular comms equipment.
- Wide range (8-16V) power supply. Can be connected during engine cranking.
- Instantly displays a readable description of any received ECU error status message.
- Lane A default display: RPM, engine hours and throttle percentage (as shown above).
- Lane B default display: RPM, engine hours and ECU bus voltage.
- A separate display mode shows engine and generator status for each ECU Lane.
- Multi-Display modes for RPM, MAP, Oil Pressure and Coolant Temperature are user configurable.
- Parallel connection to CANbuses. Does not interfere with existing connections or terminations.
- Serves as a useful backup instrument and may be used as the sole instrument for initial engine start.
- Supplied with 9-pin D-Sub connector and full instructions.

The Rotax 912iS/915iS ECU Pilot Display CANbuses

The Rotax iS series fuel-injected engines bring modern technology to the field of light aviation. They feature twin, fully redundant fuel injection and electronically controlled ignition systems managed by twin Engine Control Units (ECUs).

The ECUs communicate with EMS and cockpit instrumentation systems by means of two pilot display CANbuses. As well as transmitting conventional engine operating parameters, the CANbuses also provide additional useful information, including fifty eight specific device and sensor status messages.

Much of this additional useful information is not used or displayed by many popular EMS units. This is because, being based on conventional technology, they simply read the engine parameter data from the CANbuses and translate this to simulate conventional analogue engine instruments.

The iS Status Monitor is specifically designed to complement existing EMS displays by providing access to the additional ECU information.

For example and as shown here (left), generator and engine mode information is available at the press of a button.

Here, the engine is in economy mode (E) and Lane A is in command of generator A.

This display is particularly useful after start-up to confirm that the Lane A 'generator swap' has occurred correctly.

In the event of an ECU Lane problem (or Lane lamp illuminating) the Status Monitor immediately indicates the failure and provides a readable description of the problem (example shown left).

In the unlikely event of multiple failures, error messages are shown in a repeating sequence.

The normal display modes remain available during any error condition.

Additional multi-display modes are user selectable and enable the Status Monitor to become a simple digital RPM meter or to indicate MAP, Oil Pressure and Coolant Temperature. These modes are particularly useful when the unit is being used as an EMS backup or as the sole instrument during initial engine start and tests.

This example image shows the RPM and Oil Pressure display option.

Technical Details Summary

- Size: Fits a standard 57mm instrument recess. Requires 82 x 63 x 31(d) mm behind panel.
- Power supply range: 8-16V. Can be connected during engine cranking.
- Current consumption: 120mA max.
- Operating temperature range: -10C to +40C
- Weight: 125g
- Connection details: 9-Pin D-Sub connector.

For further information please email info@cambridgeavionics.com

Cambridge Avionics products are manufactured in the UK according to EN ISO 9000 / EN ISO 9001 and are CE marked according to 2006/95/EC, EN55022 and EN55011 Class B. They ***are not*** approved by FAA, CAA or EASA for installation in type certified aircraft.