RVD10

VEHICLE ELECTRONICS

Rugged Vehicle Display 10”

The Rugged Vehicle Display, RVD10, is a multifunction display unit. The unit is scalable to support different presentation modes: computer graphics (DVI-D), video or video on graphics. Optionally the unit can be configured to process Gigabit-streamed digital video input/ output (part of SAAB VDS-concept). In stand-alone applications, via internal GUI firmware, the presentation is controlled via onscreen menu selections, by use of the touch screen and/or function keys.

SAAB is able to meet specific customer needs for highly specialized products and services in a number of technical areas. Our rugged vehicle computer- and video- systems are designed to provide high levels of performance and reliability in the toughest environments. Whether your need is minimum space or maximum capability, we can provide a system to meet your specific application.

Rear view

Front view

Main design features

The RVD10 is based on a TFT-display with LED-backlight technology. The unit includes video/graphics blocks, driver electronics for the LCD, I/O-electronics and power supply.

In this configuration, the RVD10 is designed to be connected to the SAAB Rugged Vehicle Computer (RVC) via one single cable. The unit is also configured to support SAAB-VDS digital video systems.

The RVD10 includes 18 function- and 6 specific display keys.

The RVD10 is designed and approved for severe environmental conditions including vibration, shock, moisture, temperature, EMI etc. in accordance to MIL-STD-810 and MIL-STD-461.

Dimensions

Height	220 mm
Width	280 mm
Depth	44 mm (85 mm incl.connectors)
Weight	2,8 kg (approx.)

Miscellaneous

- Power cons: nom 25 W, max 80 W (pre-heating)
- The unit is equipped with one rear connector type MIL-C-38999, series 3, nickel-plated

Configuration

- 10.4” display; 1024*768 pixels, LED-backlight, eight bit/colour
- Resistive touch panel; 8-wire, GFG, low reflection type
- Luminance; dimmable up to 500 nit
- Dimming range; 256:1
- Contrast ratio; typically 800:1, dark ambient
- Viewing angles; left/right/up/down min 70° @ min 10 contrast ratio
- Customized switch panel with 2 x 9 function keys and 6 specific display keys + 2 indicators
- Display heater
- 1 x Computer port; Power input, DVI-D and USB
- Internal status supervisory and log
- Power input according to MIL-STD-1275, normal mode, possible restart during crank
- RAL1013 White colour

Options

- Customized surface treatment/colour
- Customized rear connector housing
- Separate power input according to MIL-STD-1275
- Customized key-pad; key-characters and key-codes
- NVIS-functionality; extended dimming range; 10.000:1 and/or NVIS-graphics mode (red colour is suppressed)
- Analogue video processing
  - DIVA-Core, 2 x Video inputs
  - 1 x VGA input, 1 x Video output
- Digital video processing
  - DIVA-Core (SAAB VDS-concept)
  - 1 x LAN-port; 100/1000Base-TX
  - 4 x LAN-ID pins
- Graphics/ alphanumeric generation
- 1 x CAN-port
- 2 x RS422/RS485/RS232 ports
- 1 x Power output; switched main power
- SAAB API for reading status and log

Summary of main design features

- Fully PC-compatible external interfaces
- MIL-C-38999 connectors
- Climatically sealed housing, IP65
- Easy maintenance, few parts
- Low power design
- Prepared for future functionality
- Instant start up < 10 s

Environmental

- Operating temperature: -40°C to +60°C
- Storage temperature: -40°C to +71°C

Specifications subject to change without notice

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