SAUER DANFOSS

DP250 Series PLUS+1 Mobile Machine Displays

Durable Color Display

Sauer-Danfoss DP250 Series Displays are elements of the PLUS+1 family of mobile machine management products.
The DP250 series provide mobile machine OEMs with a range of rugged, high quality, cost effective color displays.

DP250 Series variants include several Input options, dual CAN port options and two USB options: a USB device mini-connector on the front of the display or a USB connector on the rear of the display.

Large function-programmable buttons provide tactile feedback. The high resolution color display is viewable in a wide range of lighting conditions. Backlight and contrast settings are programmable.

The DP250 display family features robust mechanical, electrical and environmental specifications that meet the harsh operating conditions found in mobile machine applications.
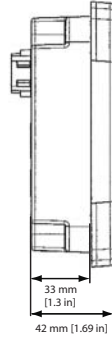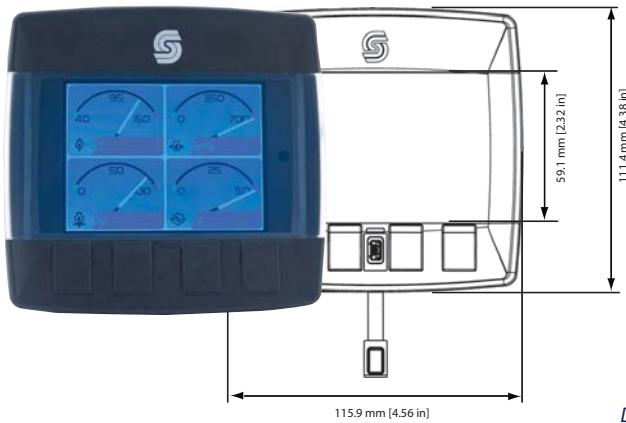
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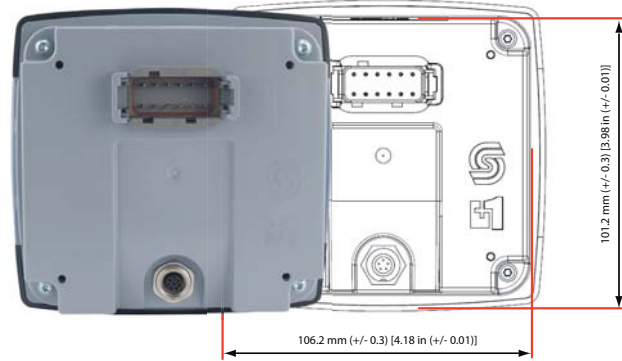
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DP250 Display

Features (Model Dependent):

- User-programmable with PLUS+1 GUIDE (Graphical User Integrated Development Environment)

- J1939 engine monitor (Engine Information Center) application software available (application keyed)

- High resolution color TFT display (240x320 pixels, 15-bit color)

- 6 software controlled LEDs (2 red, 2 amber, 2 green)

- 4 user-programmable soft keys

- 2 CAN 2.0 ports option

- 4 digital analog inputs options

- All models include 2 multifunction inputs (DIN/AIN/ FrequencyIN/CurrentIN, 4–20 mA)

- 1 fixed-range analog input/CAN shield pin

- 16 MB program memory

- 16 MB application log memory option

- Real-time clock

- Buzzer output

- Two USB options:
  - Mini USB connector (USB device function) on the front of the display
  - Binder USB connector (USB function) on the back of the display

- IP 67 ingress rating
  Exception: IP 54 rating for DP250 display with front mini-USB connector

- -30°C to 70°C (-22°F to 158°F) operating temperature range

- CE marked

DP250 Dimensions

DP250 Series Model Code

A	Model Name	
	DP250	Color Graphical Display
B	Inputs/CAN Options	
	00	1 CAN port
	01	1 CAN port, 4 DIN/AIN
	02	1 RedCAN port
	05	User Configurable: 2 CAN ports or 1 CAN port, 4 DIN/AIN
	06	User Configurable: 1 RedCAN port, 1 CAN port or 1 RedCAN port, 2 DIN/AIN
	Real Time Clock/ Low Temperature Functionality	
C	01	RTC and LTF
D	Flash Memory/Application Key	
	04	16MB without Application Key
	05	16MB with Application Key
E	Application Log	
	00	None
	05	16 MB
F	USB Port Type	
	00	None
	01	USB Device in Front
	02	USB Device in Rear

DP250 Series Ordering Information

Model	Part Num.
DP250-00-00-04-00-00	11080686
DP250-00-01-05-00-00 (EIC Installed)	11075899
DP250-01-01-04-05-00	11075900
DP250-01-01-05-05-00	11077442
DP250-05-01-04-05-00	11060814
DP250-05-01-05-05-00	11077443
DP250-06-01-04-05-01	11060816
DP250-06-01-05-05-01	11077444
DP250-02-01-04-05-02	11060919

DP250 Series Accessory Information

Model	Part Num.
DP2XX Panel Mounting Kit	11079236
Deutsch 12-pin Connector Kit (DTM06-12SA)	10100944
Binder Connector and Cable Kit (Series 702)	10103497

Mounting Panel Cutout Dimensions

DP250 Series Specifications

Processor	ARM 7 core, 16/32 bit/ 72 MHz
RAM	64KB on-chip, 1MB on board
FRAM	16 KB
Supply Voltage/ Current Consumption	9–63 Vdc/6.5W Heater 10W
Connector	Deutsch DTM-12
LCD Glass	TFT with 12-bit resolution
Resolution	320 x 240 pixels
Viewable Area	70.08 mm x 52.56 mm [3.15 x 2.16]
IP Rating	IP67 or IP54
Operation Temperature	−30 °C — +70°C [−22°F — +158°F]
Storage Temperature	−40 °C — +85°C [−40°F — +176°F]
Weight	250g [0.5lb]
Vibration/Shock	5g/ 50g
EMC/ESD	100V/m / 15kV

DP250 Binder Series 702 USB connector pin out information

1	Vbus
2	Data -
3	Data +
4	N/C
5	Ground
6	N/C
7	N/C
8	N/C

Pin 5

Pin 1

DP250 USB mini-B connector pin out information

1	Vbus
2	Data -
3	Data +
4	Device ID (NC)
5	Ground

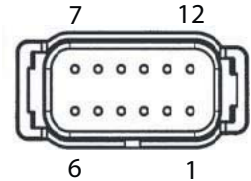Use care when wiring mating connector. Diagrams show device pins.

The DP250 front mini-USB model option carries an IP54 ingress rating. The USB cover/ plug must be in place for full IP54 protection. This model variant is recommended for in-cab installation only.

For full IP67 ingress rating of rear USB models, the cable or plug must be in place.

DP250 Series Deutsch 12-pin connector pin out information

1	Power ground-
2	Power supply+
3	CAN 0+
4	CAN 0−
5	AIN/ CAN Shield
6	See Code B option/TI
7	See Code B option/TI
8	See Code B option/TI
9	See Code B option/TI
10	DIN/AIN/FREQ IN/ CURRENT IN, RHEOSTAT
11	DIN/AIN/FREQ IN/ CURRENT IN, RHEOSTAT
12	DOUT (0.5A)

Comprehensive technical information: DP2XX Graphical Display Family Technical Information, L102602

Sauer-Danfoss product literature is online at www.sauer-danfoss.com

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