Data Sheet

DP700 Series
PLUS+1® Mobile Machine Displays

PLUS+1

Introduction

The Danfoss DP700 Series is an element of the PLUS+1® family of mobile machine management products.

The DP700 is designed to perform in the most extreme mobile machine environments.

The DP700 offers three different display options to meet your application needs for both in-cab and open usage.

The latest technology with backlight provides outstanding brightness and contrast performance resulting in an easy-to-read screen. Optically Bonded LCD/Lens Technology improves sunlight viewability and prevents fogging.

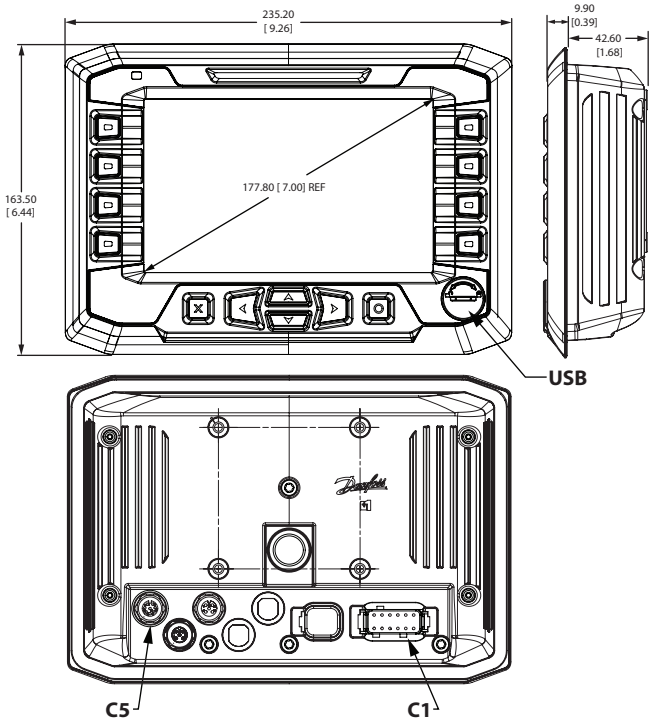
Develop your own software and layout with PLUS+1 GUIDE. A graphic library is available for fast time-to-market.

Features

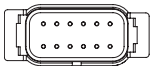
- 7" High resolution TFT display 800 x 480 pixels, 18-bit colour
- Ideal for gauges, diagnostic menus and other ancillary functions
- User-programmable with PLUS+1 GUIDE (Graphical User Integrated Development Environment)
- Optically bonded LCD
- Two multifunction inputs that include DIN/AIN/FreqIN/Rheo/4-20 mA
- Fully integrated connectors and silicone keypad provide water and dust protection from all sides
- Keypad with 14 buttons (8 soft-keys and 6 buttons for navigation)
- All buttons have white backlight design for low light and night use, all are individually software controlled
- Protective glass provides superior antiglare and contrast control under all light conditions
- Two mounting options:
  - Flush mount in dashboard
  - Stand-alone post mount according to VESA standard: 75 mm x 75 mm (2.953 in x 2.953 in)
- Can be mounted in Portrait or Landscape orientation
- Software configurable LED light bar
- USB port for fast software downloads and uploads
- Integrated light sensor for automatic backlight adjustment
- LCD luminance 400-550cd/m^2
- Digital output for external alarm buzzer
- CE compliant
- On board real-time clock

Dimensions and Pin Assignments

mm [in]



Deutsch® DTMO6 12 Pin



C1 pin	Function
C1-P1	Power ground -
C1-P2	Power supply +
C1-P3	CAN0 High +
C1-P4	CAN0 Low -
C1-P5	CAN shield/AIN
C1-P6	CAN1 High + (AIN/DIN)
C1-P7	CAN1 Low - (AIN/DIN)
C1-P8	Sensor power (AIN/DIN)
C1-P9	Sensor ground
C1-P10	Multifunction-input
C1-P11	Multifunction-input
C1-P12	DOUT

M12 8 Pin

C5 pin	Function
C5-P1	USB device Vbus
C5-P2	USB device data D-
C5-P3	USB device data D+
C5-P4	USB device GND
C5-P5	USB host GND/RS232 GND
C5-P6	USB host D+/RS232 RxD
C5-P7	USB host D-/RS232 TxD
C5-P8	USB host Vbus

Specifications

Processor	ARM11, 532 MHz
RAM	128 MB
FRAM	8 kB
Supply voltage/ Current consumption	9 to 36 Vdc/1 amp at 14 V, 0.5 amp at 28 V
LCD glass	TFT with 18 bit resolution
Viewable area	152.40 mm x 91.40 mm (6.00 in x 3.598 in)
Ingress Protection (IP) rating (with sealing plugs in unused connections)	IP 67
Operating temperature	-30° C to +60° C (-22° F to +140° F)
Storage temperature	-30° C to +80° C (-22° F to +176° F)
Weight	1000 g (2.2 lb)
Vibration	3.17 g
Shock	50 g
Electromagnetic Compatibility (EMC)	100 V/m
Electrostatic Discharge (ESD)	15 kV

Related products	Part number
Panel mounting kit	11144800
Deutsch 12 pin mating connector kit 20 to 24 AWG	10100944
Deutsch 12 pin mating connector kit 16 to 20 AWG	10102025
USB cable (device only)	11130518
USB cable (device and host)	11130519

Model Features

A	B	C	D	E	F	G	Part number
DP700	01	01	01	02	04	01	11126309
DP700	02	01	01	02	04	01	11126310
DP700	03	01	01	02	04	01	11126311

A *Model Name*

DP700	PLUS+1 Mobile Machine Displays

B *LCD Options*

01	Value—Transmissive
02	Standard—Transmissive
03	High performance— Transmissive-Enhanced View TFT

C *Touch Screen Options*

01	None

D *Input/ Output Options*

01	User configurable 1 CAN, 2 AIN/DIN, 2 DIN/AIN/FreqIn/Rheo/4-20 mA IN, DOUT 2 CAN, 2 DIN/AIN/FreqIn/Rheo/4-20 mA IN, DOUT

E *Flash Memory/ Application Key*

02	512 MB/without application key

F *USB Port Type*

04	USB device rear/USB host rear or front

G *Application Log (Vault Memory)*

01	16 MB

Danfoss
Power Solutions US Company
2800 East 13th Street
Ames, IA 50010, USA
Phone: +1 515 239 6000

Danfoss
Power Solutions GmbH & Co. OHG
Krokamp 35
D-24539 Neumünster, Germany
Phone: +49 4321 871 0

Danfoss
Power Solutions ApS
Nordborgvej 81
DK-6430 Nordborg, Denmark
Phone: +45 7488 2222

Danfoss
Power Solutions
22F, Block C, Yishan Rd
Shanghai 200233, China
Phone: +86 21 3418 5200

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed.
All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.