

Data Sheet

DP700 Series PLUS+1® Mobile Machine Displays



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

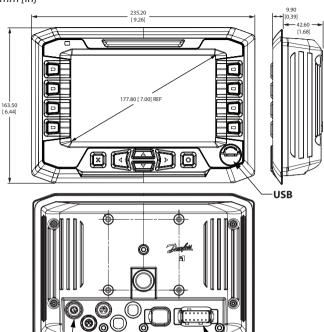
- 7" High resolution TFT display 800 x 480 pixels, 18-bit colour
- Ideal for gauges, diagnostic menus and other ancillary functions
- User-programmable with PLUS+1 GUIDE (Graphical User Integrated Development Environment)
- Optically bonded LCD
- Two multifunction inputs that include DIN/ AIN/FreqIN/Rheo/4-20 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/m²
- Digital output for external alarm buzzer
- CE compliant
- On board real-time clock



Dimensions and Pin Assignments

mm [in]



Deutsch® DTMO6 12 Pin



M12 8 Pin



C1 pin	Function	C5 pin	Function		
C1-P1	Power ground -	C5-P1	USB device Vbus		
C1-P2	Power supply +	C5-P2	USB device data D-		
C1-P3	CAN0 High +	C5-P3	USB device data D+		
C1-P4	CAN0 Low -	C5-P4	USB device GND		
C1-P5	CAN shield/AIN	C5-P5	USB host GND/RS232 GND		
C1-P6	CAN1 High + (AIN/DIN)	C5-P6	USB host D+/RS232 RxD		
C1-P7	CAN1 Low - (AIN/DIN)	C5-P7	USB host D-/RS232 TxD		
C1-P8	Sensor power (AIN/DIN)	C5-P8	USB host Vbus		
C1-P9	Sensor ground				
C1-P10	Multifunction-input				
C1-P11	Multifunction-input				
C1-P12	DOUT				

Specifications

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

Α	В	С	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

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

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