



Data Sheet

DP720 Series PLUS+1® Mobile Machine Displays



Introduction

The Danfoss DP720 Series is an element of the PLUS+1® family of mobile machine management products.

The DP720 is designed to perform in the most extreme mobile machine environments.

The DP720 offers three different display options to meet your application needs for both in-cab and open usage. The display is equipped with a Projective Capacitive touch screen that works through mud, water and with gloves on.

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.

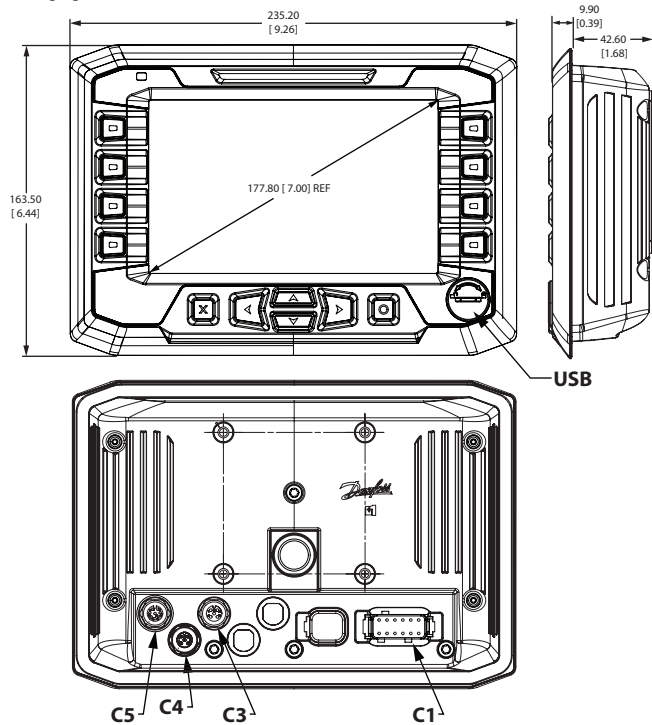
Develop your own software and layout with PLUS+1® GUIDE. A graphic library is available for fast time-to-market.

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
- Projective Capacitive Touch screen
- Two optional video inputs with both PAL and NTSC support
- 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]



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	11129829
Deutsch 12 pin mating connector kit 20 to 24 AWG	10100944
Deutsch 12 pin mating connector kit 16 to 20 AWG	10102025
Mating connector kit	11130520
USB cable (device only)	11130518
USB cable (device and host)	11130519

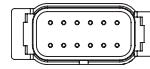
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Deutsch®DTMO6 12 Pin



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 D-
C5-P3	USB device 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

M12 5 Pin



C3 pin	Function
C3-P1	Video power ground
C3-P2	Video power supply
C3-P3	Video signal input 1
C3-P4	Video signal input ground
C3-P5	NC

M12 5 Pin



C4 pin	Function
C4-P1	Video power ground
C4-P2	Video power supply
C4-P3	Video signal input 2
C4-P4	Video signal input ground
C4-P5	NC

Model Features

A	B	C	D	E	F	G	Part number
DP720	01	02	02	02	04	01	11126325
DP720	02	02	02	02	04	01	11126326
DP720	03	02	02	02	04	01	11126327

A	Model Name <table border="1"> <tr> <td>DP720</td> <td>PLUS+1® Mobile Machine Displays</td> </tr> </table>	DP720	PLUS+1® Mobile Machine Displays				
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B	LCD Options <table border="1"> <tr> <td>01</td> <td>Value—Transmissive</td> </tr> <tr> <td>02</td> <td>Standard—Transmissive</td> </tr> <tr> <td>03</td> <td>High performance—Transmissive-Enhanced View TFT</td> </tr> </table>	01	Value—Transmissive	02	Standard—Transmissive	03	High performance—Transmissive-Enhanced View TFT
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C	Touch Screen Options <table border="1"> <tr> <td>02</td> <td>Projective capacitive touch</td> </tr> </table>	02	Projective capacitive touch				
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D	Input/ Output Options <table border="1"> <tr> <td>02</td> <td>User configurable 1 CAN, 2 AIN/DIN, 2 DIN/AIN/FreqIn/Rheo/4-20 mA IN, 2 Video IN, DOUT 2 CAN, 2 DIN/AIN/FreqIn/Rheo/4-20 mA IN, 2 Video IN, DOUT</td> </tr> </table>	02	User configurable 1 CAN, 2 AIN/DIN, 2 DIN/AIN/FreqIn/Rheo/4-20 mA IN, 2 Video IN, DOUT 2 CAN, 2 DIN/AIN/FreqIn/Rheo/4-20 mA IN, 2 Video IN, DOUT				
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E	Flash Memory/ Application Key <table border="1"> <tr> <td>02</td> <td>512 MB/without application key</td> </tr> </table>	02	512 MB/without application key				
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F	USB Port Type <table border="1"> <tr> <td>04</td> <td>USB device rear/USB host rear or front</td> </tr> </table>	04	USB device rear/USB host rear or front				
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G	Application Log (Vault Memory) <table border="1"> <tr> <td>01</td> <td>16 MB</td> </tr> </table>	01	16 MB				
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