

ENGINEERING TOMORROW

Danfos

# Data Sheet **DP730 Series** PLUS+1<sup>®</sup> Mobile Machine Displays

The Danfoss DP730 Series is an element of the PLUS +1<sup>®</sup> family of mobile machine management products.

The DP730 is designed to perform in the most extreme mobile machine environments.

The DP730 offers different display options to meet your application needs. 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 view-ability and prevents fogging.

Develop and customize your display using PLUS+1<sup>®</sup> GUIDE and the GUIDE Vector Based Screen Editor (VBSE).

#### 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<sup>®</sup> GUIDE (Graphical User Integrated Development Environment)
- Optically bonded LCD
- Projective Capacitive Touch screen
- Video inputs:
- Two connectors are available for PAL or NTSC signals
- Only one video input at time can be overlay-ed on screen
- 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
- 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 brightness >800cd/m<sup>2</sup>
- LCD contrast 1000:1
- Digital output for external alarm buzzer
- CE compliant
- On board real-time clock
- 16 MB of flash vault memory (application logging memory)

Comprehensive technical literature is online at *www.danfoss.com* 

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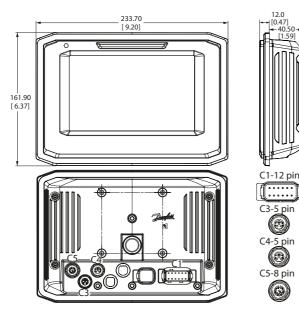
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# Data Sheet **DP730 Series**

### DP730 dimensions (mm [in]); C1, C3, C4, C5 connectors



# **Pin assignments**

# C1—DEUTSCH DTMO6 12 pin

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

### C3 and C4—M12 5 pin

Pin	Function	Pins	Function
<b>C3</b> -P1	Video power GND C4-P1		Video power GND
C3-P2	Video power supply	C4-P2 Video power supply	
C3-P3	Video signal input 1	C4-P3 Video signal input 2	
C3-P4	Video signal input GND	C4-P4	Video signal input GND
C3-P5	NC	C4-P5	NC

# C5—M12 8 pin

Pin	Function	Pins	Function
<b>C5</b> -P1	USB device V <sub>BUS</sub> C5-P5		USB host GND/RS232 GND
C5-P2	USB device data D-	C5-P6	USB host D+/RS232 RxD
C5-P3	USB device data D+	C5-P7	USB host D-/RS232 TxD
C5-P4	USB device GND	C5-P8	USB host V <sub>BUS</sub>

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#### Specifications

Processor	ARM11, 532 MHz
RAM	128 MB
FRAM	8 kB
Supply voltage / current consumption	9 to 36 V <sub>DC</sub> / 1 amp at 14 V, 0.5 amp at 28 V
LCD type	Transmissive In-Plane Switching (IPS)
Viewable area	152.40 mm x 91.40 mm [6.00 in x 3.598 in]
IP rating	Front: IP 69K; Rear: 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
EMC	100 V/m
ESD	15 kV

#### **Ordering information**

Model features and product part numbers

Α	В	c	D	E	F	G	н	Part number
DP730	04	02	02	02	02	01	00	11264363

Model features Code		Code	Description	Description		
A	Model name	DP730	PLUS+1 <sup>®</sup> Mobile Ma	PLUS+1 <sup>®</sup> Mobile Machine Displays		
В	LCD options	04	Transmissive In-Plan	Transmissive In-Plane Switching (IPS)		
С	Touchscreen options	02	Projective capacitive	Projective capacitive touch		
D	Input / output options	02	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 ap	512 MB / without application key		
F	USB port type	02	USB device rear / US	USB device rear / USB host rear or front		
G	Application log (vault memory)	01	16 MB	16 MB		
н	Bezel color	00	Black	Black		
		01	Gray			

#### Related products

Related product	Part number
Panel mounting kit	11144800
DEUTSCH 12 pin mating connector kit 20 AWG	10100944
DEUTSCH 12 pin mating connector kit 16 to 22 AWG	10102025
Mating connector kit with camera cable	11130520
USB cable (device only)	11130518
USB cable (device and host)	11130519

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