

Data Sheet

PLUS+1[®] Mobile Machine Displays

DP6XX Series



The Danfoss DP6XX Series is an element of the PLUS+1[®] family of mobile machine management products.

The DP6XX design provides mobile machine OEMs with a rugged, high performing color display, both in-cab and open usage.

With two external video inputs providing system overview, mobile equipment is ensured safe operation.

These transfective, thin film transistor (TFT), high resolution color displays fit your budget without losing performance quality.

The DP6XX features include robust mechanical, electrical and environmental specifications that meet the harsh operating conditions found in mobile machine applications.



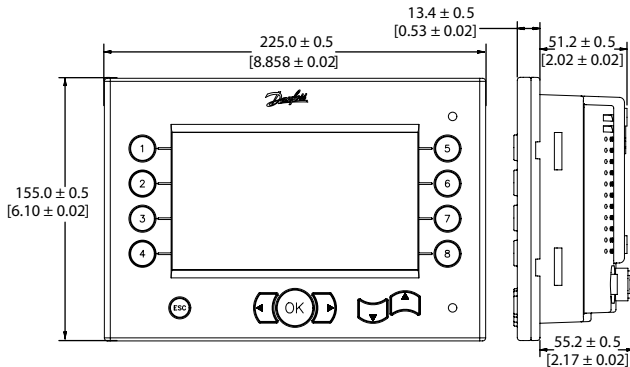
Features

- User-programmable with PLUS+1[®] GUIDE (Graphical User Integrated Development Environment)
- Same outside dimensions for both screen variants:
 - 256 Color advanced TFT display 400 x 240 pixels, transfective
 - Monochrome LCD 320 x 240 pixels, transfective
- Protective glass integrated into keypad 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]
- Fully integrated connectors and silicone keypad provide water and dust protection from all sides
- Wide storage and operating temperature range
- GORE-TEX[®] membrane prevents moisture ingress and screen fogging
- Keypad with 14 buttons (8 soft-keys + 6 buttons for navigation)
- All buttons have green backlight design for low light and night use
- Ultra-bright red alarm LED
- On board real-time clock
- USB port for fast software downloads and uploads
- Integrated light sensor for automatic backlight adjustment
- Inputs for external menu navigation button give the driver full control while driving
- Digital output for external ALARM buzzer
- Up to two external video inputs
- CE compliant

[Comprehensive technical literature online at powersolutions.danfoss.com](http://powersolutions.danfoss.com)

Dimensions

mm [in]



Specifications

Hardware

Description	DP600	DP610	DP620
Processor	ARM 7		
ROM	8 MB		
RAM	8 MB		
FRAM	8 KB (256 K available for application storage)		
Real time clock	Date and Time accuracy: 1 second/24 hours Minimum back-up time: 30 days		
Power supply/ consumption	9 to 36 Vdc/15 W maximum		

Connector

Description	DP600	DP610	DP620
DEUTSCH DTM	12 pin		
DEUTSCH DTM	6 pin		
Binder (USB/ RS232)	7 pin		
Binder (video)	5 pin	-	-

Display

Description	DP600	DP610	DP620
Resolution (dpi)	400 x 240		320 x 240
Size/type	6.5 in/TFT Color		6 in/LCD Monochrome
Feature	Transflective		

Environmental

Description	DP600	DP610	DP620
IP rating	IP 67 (with sealing plugs in unused connections)		
Operating/ storage temp.	-30° C to 70° C (-22° F to 158° F)		-20° C to 70° C (-4° F to 158° F)
Weight	1100g		
Vibration; Shock	5g/50g		
EMC/ESD	100 V/m; 15 kV		

Communication

Description	DP600	DP610	DP620
CAN 2.0B	2 Baud rates: 111 kbit, 250 kbit, 500 kbit, 1Mbit 2 pins for CAN shield (acc. to J1939) (2nd CAN port internally terminated at 120Ω)		
USB	2.0		
RS232	Baud rates: 1200, 2400, 9600, 19, 200, 28, 800, 38, 400, 115, 200 baud. No handshake available.		

Inputs/outputs

Description	DP600	DP610	DP620
Digital inputs	3 (2 inputs designed for 90° A/B encoder signals)		
Light sensor	Integrated ambient		
LED	Integrated high brightness		
Video input	2*	-	-
Digital output (0.5A) 1	1		

* Only one video input at a time possible

Ordering information and related products

Description	Part number
DP600	10100890
DP610	10100889
DP620	10100888
Panel mounting kit	10101363
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	11109743
USB cable (device only)	10103497