

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.



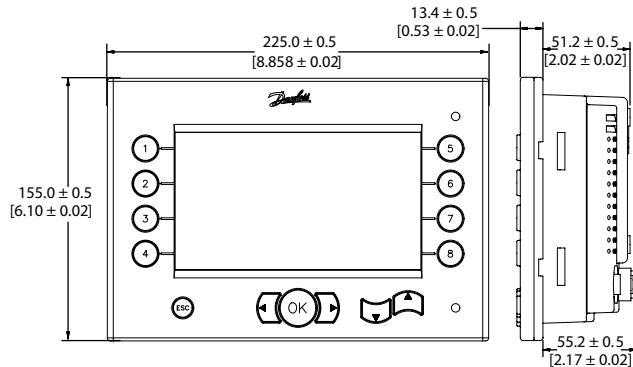
Features

- 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 |