

- Panel PCs with foil front
- All in one solution for quick installation saves space and costs
- Powerful PC system for enhanced performance
- Can also be integrated into existing systems
- Completely redeveloped

Böning Automationstechnologie's new generation of displays expands its product range in the display category with innovative devices.

Combining increased performance and functionality in a valuable modern design, they increase operational safety and ease of operation on ship bridges. Their luminosity of up to 1000 cd/m² ensures good readability at all times, even during bright sunlight. Automatic dimming further ensures that the displays operate without glare especially when cruising at night.

Automotive components allow the displays to be used in greater temperature ranges than previous displays.

Their 24 V DC power supply makes these devices especially suitable for use on ships.

The latest display technology provides even more brilliant colors and a markedly increased view angle.

Basic functions such as alarm acknowledgement and brightness control can be quickly accessed with the built-in buttons.

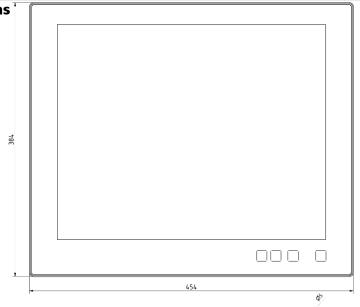
The powerful Panel PCs allow safe and reliable operation, even in extreme conditions.

The visualization system with embedded operating system operates completely autonomously. Advantage: it requires neither firewalls nor virus scanners, and in addition, the configuration cannot be changed by accident.

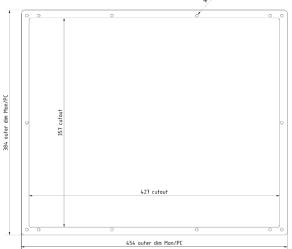
These PCs were especially developed for maritime use. The absence of moveable parts, such as hard disks, makes the device insensitive to shock and thus ideally suited for use on ships. The passive cooling system significantly contributes to its operational safety. The device is optionally available with DVI and VGA interfaces for displaying for example electronic sea charts.











## **Technical Data**

| Power supply                         | 24 V DC (+30% / -25%)                          |
|--------------------------------------|--|
| Power consumption Ca. 60 W (24 V DC) |  |
| Ambient                              | -30°C+55°C (-30°C+70°C at                      |
| temperature                          | interior console temperature of max. $+45$ °C) |
| Storage                              | -50°C+85°C                                     |
| temperature                          |  |
| Weight                               | Ca. 12 kg                                      |
| Protection class                     | IP 56 (front side), IP 20 (rear side)          |
| Dimensions                           | 454 x 384 x 115                                |
| $W \times H \times D (mm)$           | Installation depth min. 140 mm                 |
| Panel cutout (mm)                    | 427 x 357                                      |
| Processor                            | 2.0 GHz Quad Core                              |
| RAM                                  | 8 GB   |
| Flash disk                           | 128 GB   |
| Approvals                            | DNV, CRS, LR, RS                               |

| Interfaces        | 7 x CAN (6 x system integration,<br>1 x remote control) |
|-------------------|---|
|                   | 1 x RS 232 (for example for GPS)                        |
|                   | 1 x LAN   |
|                   | 2 x USB (for example for a mouse)                       |
|                   | 1 x Video (50 Hz, PAL, BNC)                             |
|                   | 2 x DVI IN (Optional)                                   |
|                   | 1 x VGA (Optional)                                      |
|                   | Digital IN (4 x optocoupler)                            |
|                   | Digital OUT (5 x relay)                                 |
| Resolution        | 1280 x 1024 pixels (H x V; max., SXGA)                  |
| Luminosity        | 1000 cd/m <sup>2</sup>                                  |
| Contrast          | 2000:1  |
| Viewing angle     | Horizontal -89° / +89°<br>vertical -89° / +89°          |
| Required distance | Steering magnetic compass: 1.00 m                       |
| to compass        | Standard magnetic compass: 1.80 m                       |
| Item number       | 20212   |
|                   | 16358 (With DVI and VGA)                                |