Image is similar.

Chartplotter Gateway for B:MACS_PE System

- Plotter gateway connects Böning alarm system to chartplotters of the manufacturers Garmin, Raymarine or Furuno

- Network connection at 2 separate LAN interfaces, communication with modern HTML5 protocol

- Individual graphical visualization of any ship data, configuration with Böning Display Designer 2.0

- HDMI-only mode for alternative use of external displays

Böning
SHIP AUTOMATION

Description

With its integrated gateway functions, AHD-CPG provides the platform for setting up a Böning B:MACSPE system. AHD-CPG converts all available data of the Böning ship alarm system to the HTML5 format and forwards them in an IP network to the external chartplotter. The chartplotter must be able to process the protocol appropriately and to display the desired data. Currently the following chartplotters are supported:

- Garmin "One Helm" system
- Raymarine "Lighthouse"
- Current Multi Function Displays from Furuno

AHD-CPG has two separate network interfaces to ensure the clean separation of the Böning ship alarm system and the chartplotter network.

Configuration

A project-specific graphical visualization must be created for the chartplotter. The graphical design is created with the Böning tool Display Designer 2.0 and transferred to the gateway AHD-CPG. All ship data available in the Böning alarm system are processed in the gateway and can be displayed as desired.
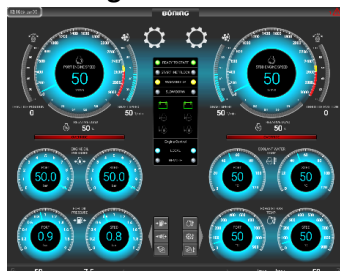
Visualization examples

Main Menu

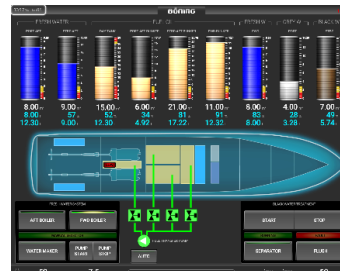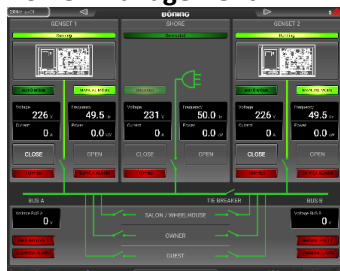**Navigation**
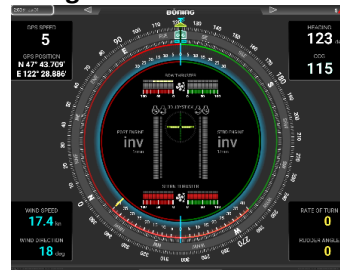
Doors & Hatches

Main Engines
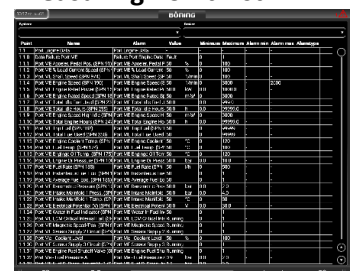
Tanks

Bilge System

Power Management

Wiper Control

Measuring Point List

B:MACS_{PE} System Components

The Böning ship alarm system acquires analog and digital data with almost any number of data stations. The extension to a control system can be implemented, for example, with relay output devices.

The central data processing station AHD-DPU 9 is equipped with six CAN bus interfaces (SAE J1939, NMEA 2000), three serial lines (NMEA 0183, Modbus RTU) and a network connection allowing direct connection to the gateway AHD-CPG. Local displays are also part of the standard equipment of a Böning ship alarm system.
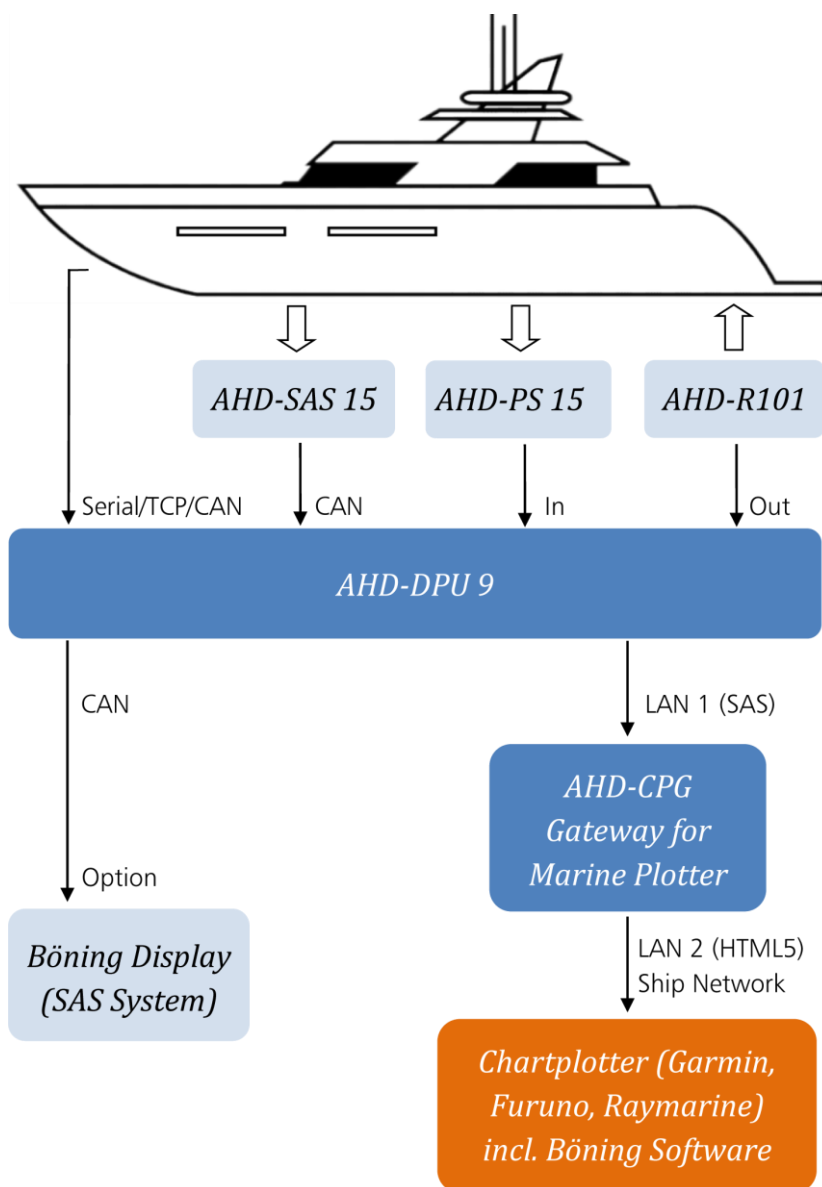
Note

Optionally, further öning devices are available for specialized applications, e.g. AHD-RB6 for light control (Böning CabinCon system) or for power control (pumps, ventilation, air conditioning, etc.).

Device view

USB Touch In · HDMI out to MFD · Power 9..36V · Böning LAN · MFD LAN

DIN-rail bracket
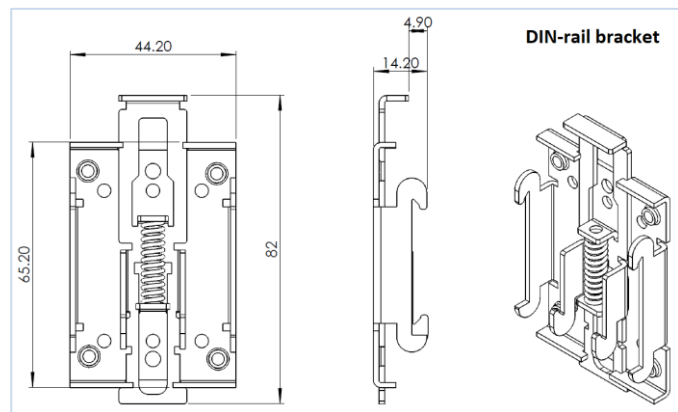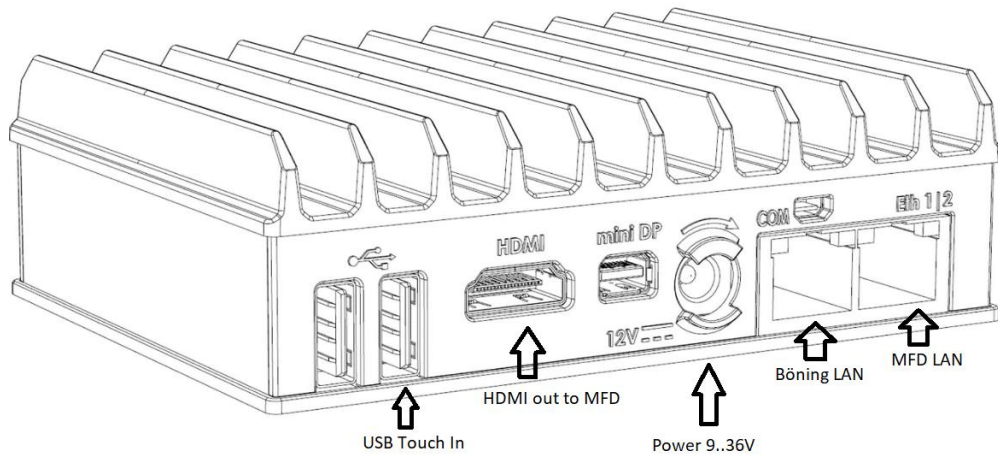
Technical data

Dimensions: B x H x T	112 mm x 84 mm x 34 mm
Weight	Ca. 0.35 kg
Operating temperature	-25°C … +70°C (Industrial)
Storage temperature	-40°C … +85°C (Industrial)
Relative humidity	5% to 95% (non-condensing)
Power supply	9…36 V DC max. 3000 mA @ 12 V or 110…230 V AC with included power adapter
Processor	Quad Core CPU (Intel Apollo Lake) Passive cooling system
Operating system	Windows 10 IoT
Supported interfaces	2 x USB 3.0 2 x USB 2.0 1 x HDMI (up to 3840 x 2160 @ 30 Hz) 2 x Ethernet port (RJ45)
Options	WiFi Cellular communication
Mounting	Rail mounting with included bracket
Item numbers	Garmin: 20613 Raymarine: 20614 Furuno: 20615 HDMI only: 20616