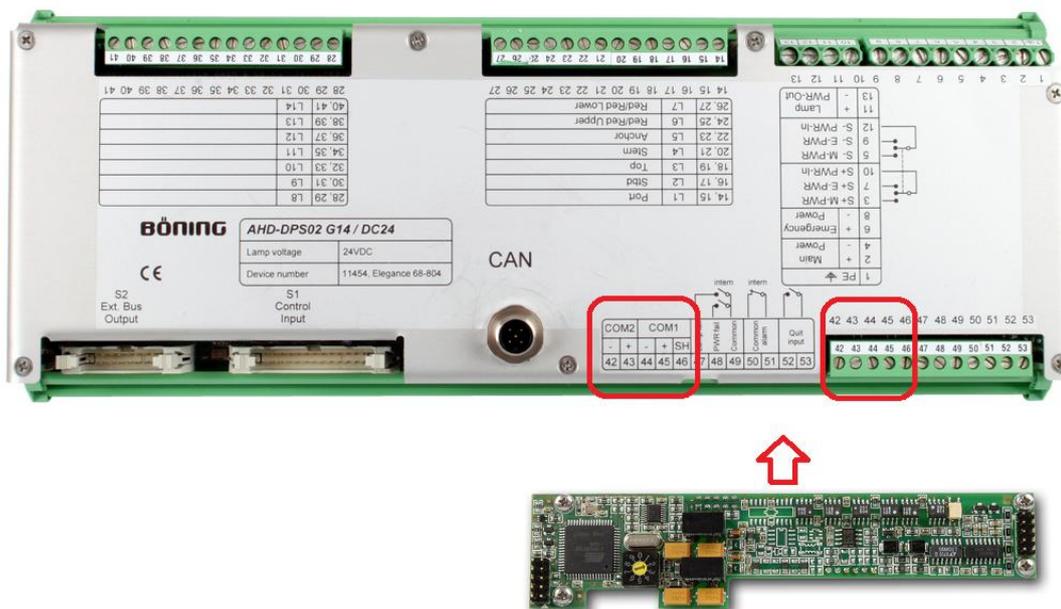


AHD-DPS02 GC Communication Module

Position and signal lights control and monitoring



- **Plug-in module for integration into the AHD-DPS02 G14 base module**
- **Function extension with CAN bus or RS485/RS422 interface, various variants available for a wide range of applications**
- **Enables, among other things, remote control via external ModBus/RTU systems, the establishment of a redundant CAN bus structure, or the data transmission to a voyage data recorder**
- **Interfaces can be connected directly to the base module via terminal strip (COM1 and COM2)**
- **Approvals: ABS, BV, CRS, DNV, LR, PRS, RINA**

Description

The AHD-DPS02 system is used to control and monitor position and signal lights on ships. AHD-DPS 02 GC is a communication module that can be plugged onto the electronics card of the AHD-DPS02 G14 base module. This allows the system to be expanded with additional interfaces and functionalities.

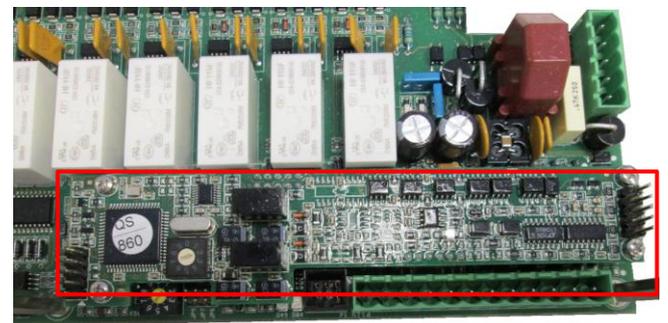
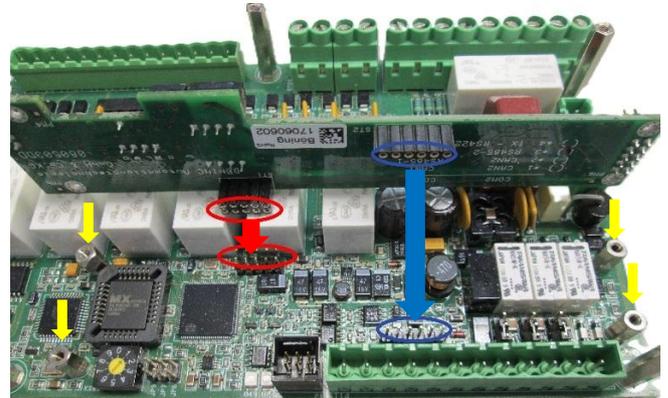
The AHD-DPS02 GC module is available in different versions, offering a selection of interfaces and protocols, including Modbus RTU, NMEA 0183, and additional CAN bus.

The connection cables are routed directly to the terminals of the base module as a 2 x 2-wire (RS485 / CAN) or 1x4-wire (RS422) interface.

Depending on requirements, a redundant CAN bus can be set up, data can be sent to a VDR system (Voyage Data Recorder), or an external system can be used for remote control and monitoring of position and signal lanterns via ModBus RTU.

Installation AHD-DPS02 GC

1. Remove the front panel from the AHD-DPS02 G14 base module by loosening the 7 screws.
2. Remove the 4 stud bolts from the AHD-DPS02 GC interface module and attach them to the G14
3. Connect the AHD-DPS02 GC interface module to all 8 poles of ST1 using the connector (red).
4. Connect the AHD-DPS02GC interface module to all 6 poles of ST2 with the connector (blue).
5. Align the 4 mounting holes of the AHD-DPS02 GC with all 4 holes of the stud bolts (yellow).
6. Fasten the 4 screws to the stud bolts to attach the AHD-DPS02 GC interface module to the G14.
7. Attach the 7 screws to the front panel of the AHD-DPS02 G14 base module to close the housing.



Versions and terminal assignment for AHD-DPS02 GC

| G14 Terminal name | G14 Terminal number | GC item no. #11231 | GC item no. #12254 | GC item no. #12256 | GC item no. #12258 |
|-------------------|---------------------|---------------------------|---------------------------------------|-----------------------------------|------------------------|
| | | 4-wire serial 1x RS422 | 2-wire serial 2x CAN ¹⁾ | 2-wire serial 1x RS485, 1x CAN | Modbus RTU 2x RS485 |
| COM1 + | 45 | MOD2+ _RX | CAN1H | MOD1 + | MOD1 + |
| COM1 - | 44 | MOD2- _RX | CAN1L | MOD1 - | MOD1 - |
| COM1 SH | 46 | CAN shield (COM1) | | | |
| COM2 + | 43 | MOD2+ _TX | CAN2H | CAN2H | MOD2 + |
| COM2 - | 42 | MOD2- _TX | CAN2L | CAN2L | MOD2 - |

¹⁾ In item no. #12254, the CAN bus (5-pin Lumberg socket) available on the AHD-DPS02 G14 base module is routed in parallel to the COM2 terminals (43,42). Therefore, only 2 CAN buses are available at the same time.

Technical data

AHD-DPS02 GC Communication Module

| | |
|-----------------------|-----------------------|
| Power supply | 24 V DC (+30% / -25%) |
| (via AHD-DPS02 G14) | |
| Current consumption | 50 mA |
| Operating temperature | -25 °C...70 °C |
| Storage temperature | -30 °C...85 °C |
| Weight | 0.05 kg |
| Protection class | IP 00 |
| Dimensions | Approx. 160 x 38 mm |

| | |
|--------------|--|
| Installation | Plug-in module |
| Approvals | ABS, BV, CRS, DNV, LR, PRS, RINA |
| Item no. | Version / Interfaces |
| 11231 | 1x RS422 |
| 12254 | 2x CAN (COM2=AHD-DPS02 G14 CAN bus parallel on terminal) |
| 12256 | 1x CAN, 1x RS485 |
| 12258 | 2x RS485 |