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µP based BNWAS le guardian 2025 acc MSC.128(75)

- *easy and comfortable use on bridge area or for engine room watch*
- *2 x 16 character display with blue night illumination generates maximum of information and comfort*
- *compact connecting module picks-up all periphery equipment*
- *easy to install (complete installation within 3 min.)*
- *modern control philosophy with rotary encoder allows to check all connected devices and links*
- *all major classification societies, fully in compliance with IEC 62616 standard*

operating device
144x72mm

MADE IN GERMANY

connecting module

control elements and special features:

- *key switch for lock / unlock*
- *2 x 16 character blue light display shows all relevant device and alarm states*
- *rotary encoder w. integrated push button allow highest operating comfort*
- *centralized dimmer for controller display and reset units*
- *integrated buzzer with soft start, 8 individual sound characteristics and volume adjustment*
- *system voltage: 24VDC nominal (18,0....31,2V)*
- *cnnecting module designed for TS 35 terminal rail*
- *emergency call facility (manual & alarm transfer)*
- *NMEA bi-directional serial interface (e.g. for VDR link)*

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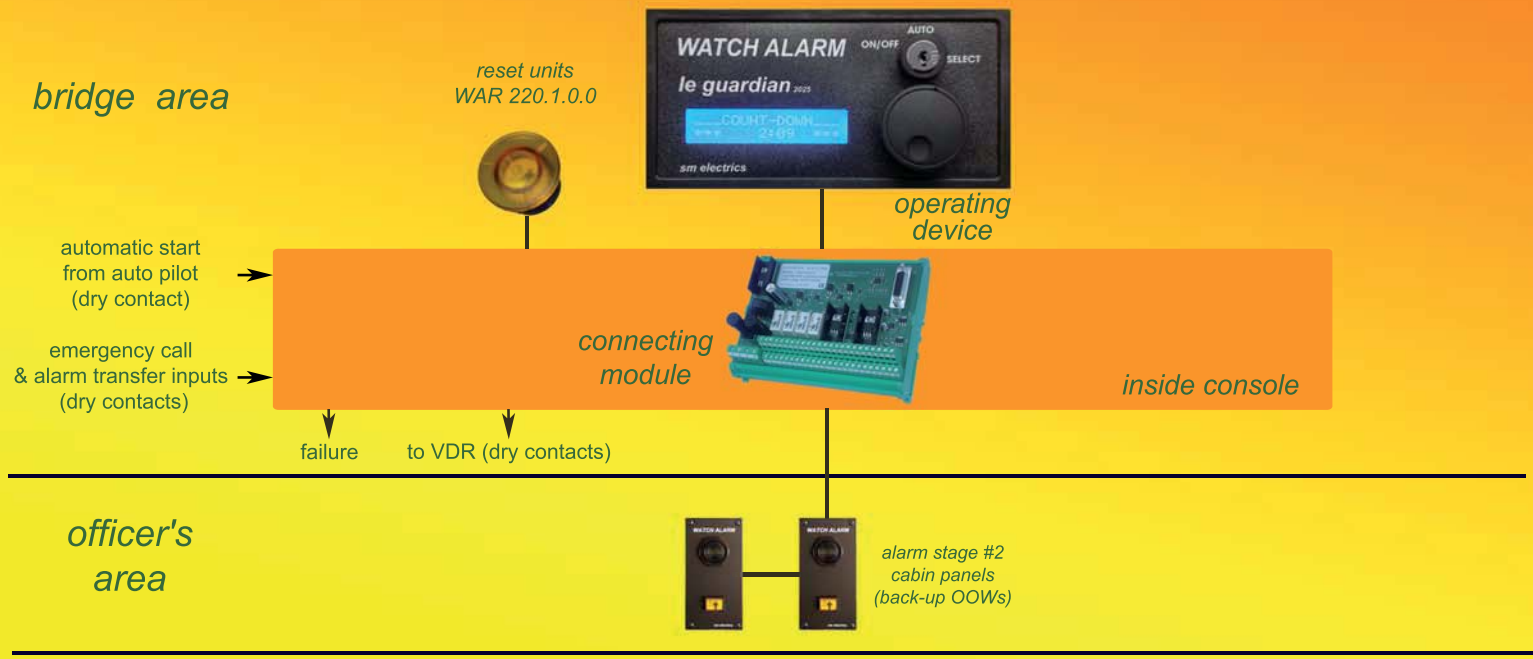
sample system for small sized vessel



MSC 86 - legal background -

a bridge navigational watch alarm system (BNWAS) has to be installed as follows:

- *ships of 150 gross tonnage and upwards and passenger ships irrespective of size constructed on or after 1 July 2011;*

- *passenger ships irrespective of size constructed 1 July 2011, not later than first survey after 1 July 2011;*

- *ships of 3,000 gross tonnage and upwards constructed before 1 July 2011, not later than the first survey after 1 July 2012;*

- *ships of 500 gross tonnage and upwards but less than 3,000 gross tonnage constructed before 1 July 2011, not later than the first survey after 1 July 2013*

- *ships of 150 gross tonnage and upwards but less than 500 gross tonnage constructed before 1 July 2011, not later than the first survey after 1 July 2014*

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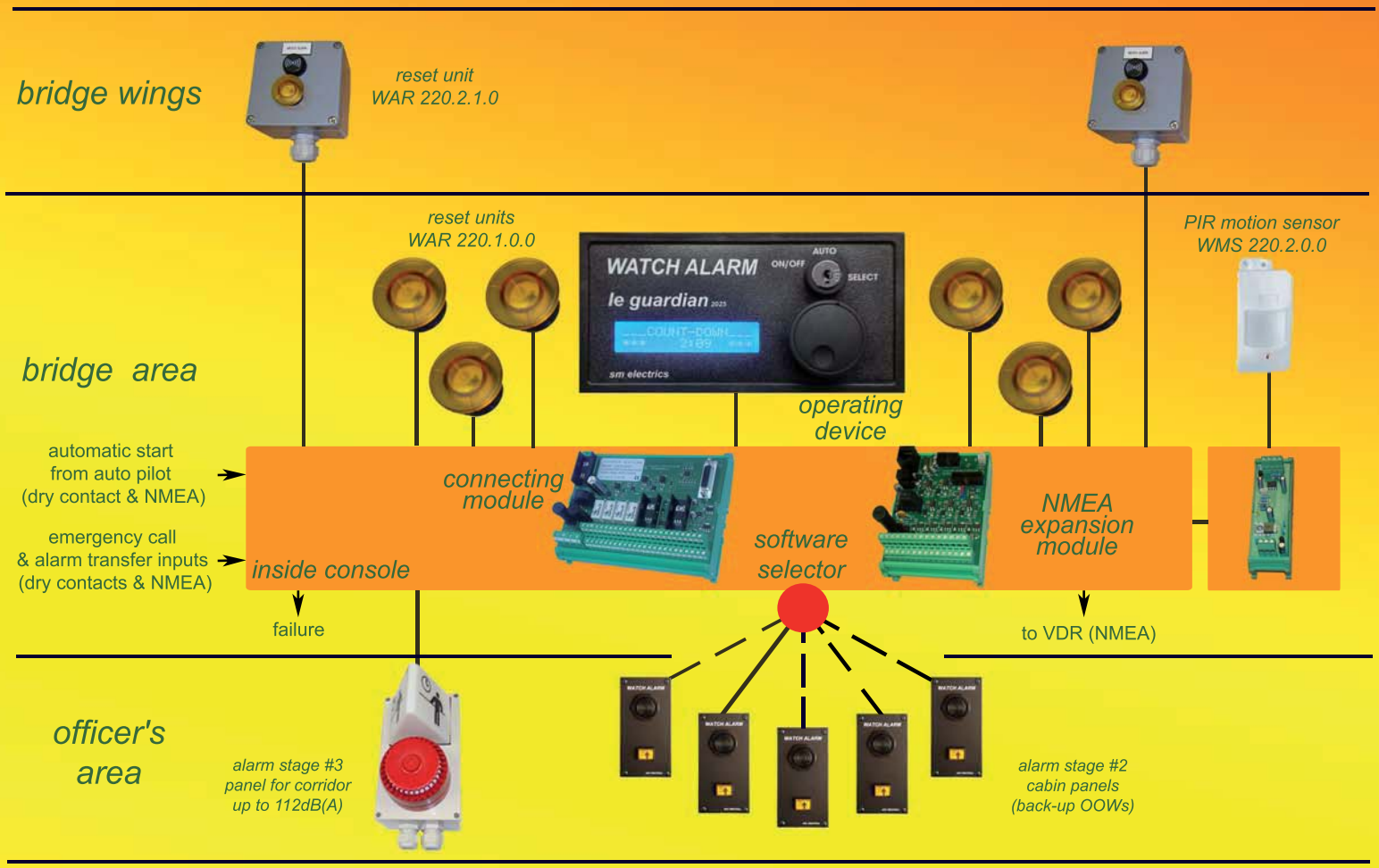
sample system for huge sized vessel



software selector switch for stage #2 alarm

- when key switch has been turned to position „SELECT“ a selection menue opens and Master decides which back-up OOW cabin receives stage #2 alarm. Multiple choice is possible!

12m 90° PIR motion sensor

- that sensor is supporting OOW by generating a count-down reset in case sensor detects a significant OOW movement.
- up to 4 sensors can operate parallel

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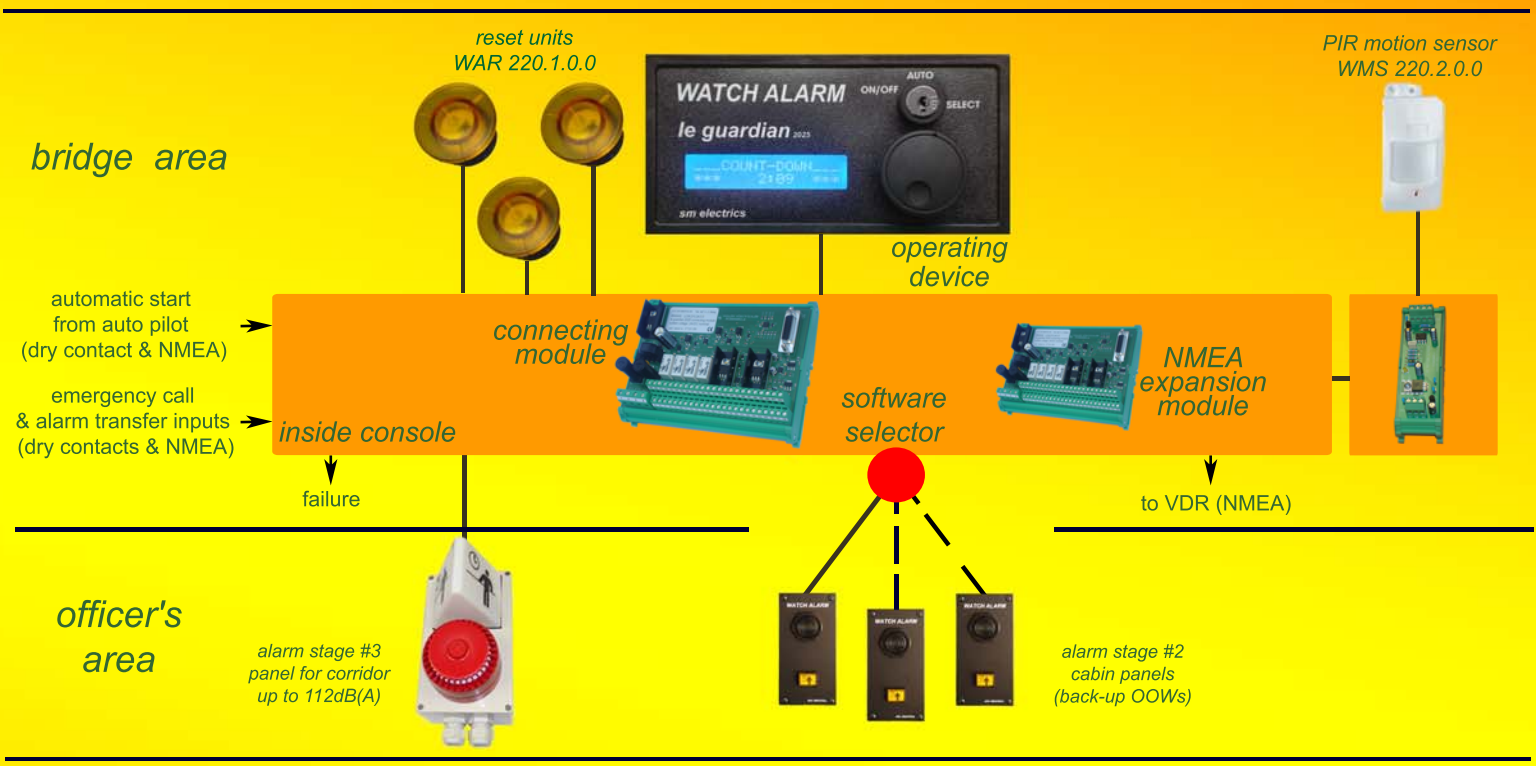
sample system for medium sized vessel



NMEA interface

- according to NMEA protocol IEC 61162-1 system sends all relevant operating states to NMEA receiver, especially VDR system.

emergency call facility & alarm transfer (unacknowledged alarms)

- clever logic allows to generate from each reset unit manually an emergency back-up OOW call

- 5 binary inputs (dry contacts expected) can be used to collect unacknowledged Nautical alarms transferring them to back-up OOW (time delay adjustable)

BNWAS le guardian 2025
periphery equipment

PIR motion sensor
with electronic module
(12m, 90°)
WMS 220.2.0.0

PIR motion sensor for „automatic“ count-down reset

- *that useful periphery equipment makes OOW's job so much easier and is increasing safety level on board*

- *clever timer / counter facility avoids accidental detection by ignoring typical ship's movement*

- *complete sensor kit includes sensor with patch cable & distribution box and electronic modul to be used as an extension to existing connecting module*

- *up to 4 sensor kits can be in operation parallel*

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BNWAS le guardian 2025
periphery equipment

PIR motion sensor
with electronic module
(12m, 90°)
WMS 220. 2.0.0

reset push button
pre- alarm indication
bridge area
WAR 220.1.0.0

reset unit in wall box
pre- alarm indication
bridge area
WAR 220.2.0.0

reset unit w. buzzer
pre- alarm & alarm stage #1
open bridge wing area
WAR 220.2.1.0

extension sounder
alarm stage #1
bridge area
WAB 220.2.0.0

alarm stage #2
alarm panel
officer's cabin
WAP 220.2.0.0

alarm stage #2
alarm panel
officer's cabin
WAP 220.5.0.0

alarm stage #3
alarm panel
officer's corridor
WAP 220.4.0.0

- NMEA expansion module
(for VDR link)
incl. software selector for
stage #2 alarm
- alarm transfer & emergency
call facility (5 binary
inputs & NMEA)
NMEA 210.24.0.0

wall box to cover
1x LCM connecting module
1x NMEA expansion module
2x motion sensor module
incl. 16 cable glands M16x1,5
WBC 210.1.0.0

desk / wall / ceiling swivel bracket
for operating device
WMB 220.1.0.0

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safety on board