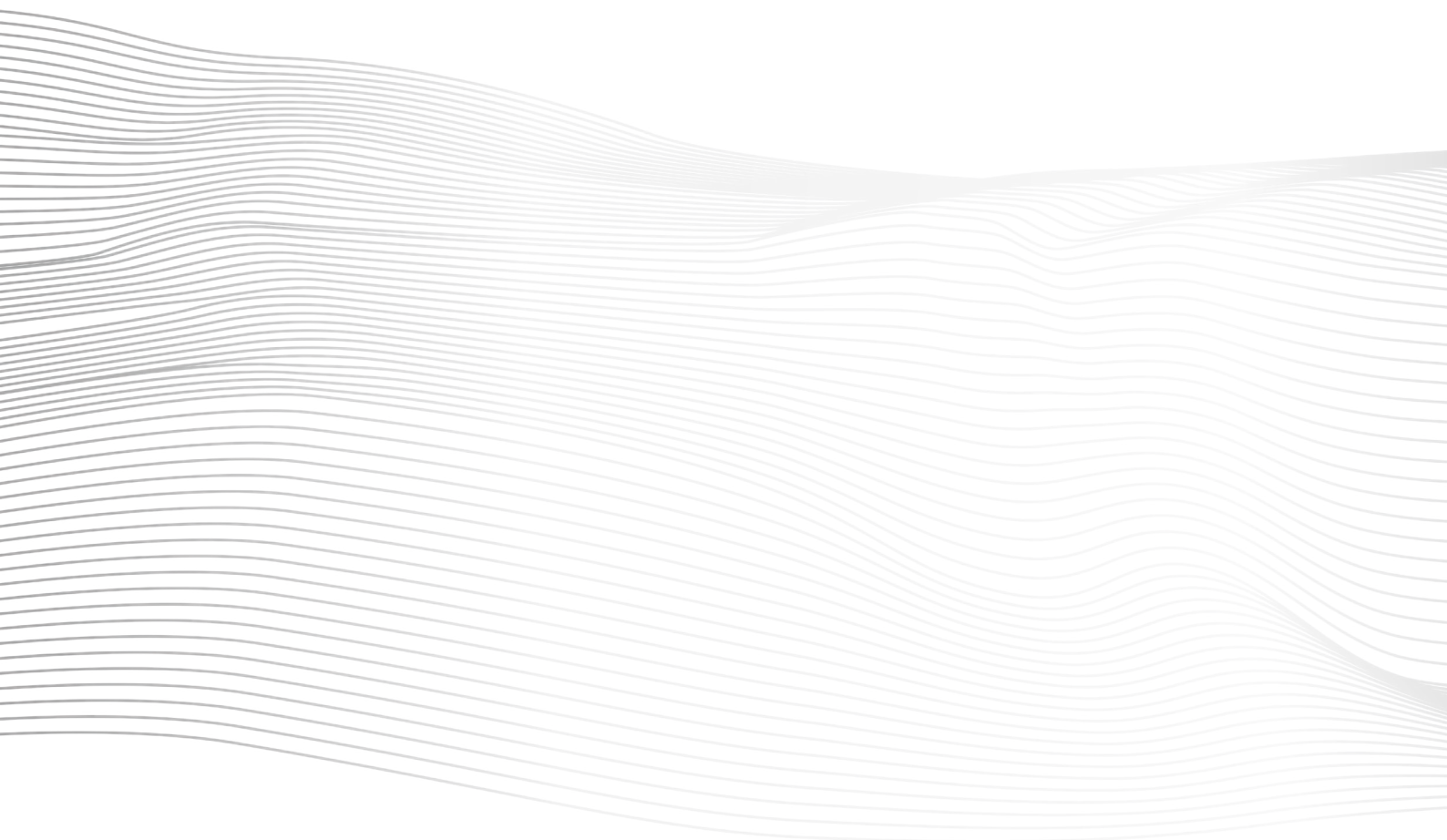

BRIDGE NAVIGATIONAL WATCH ALARM SYSTEM

BNWAS



sm electrics



safety on board.



BRIDGE NAVIGATIONAL WATCH ALARM SYSTEM

BNWAS le guardian ²⁰²⁵

The bridge navigational watch alarm system (BNWAS) monitors bridge activity and detects operator disability that could lead to marine accidents. The system monitors the awareness of the Officer Of the Watch (OOW) and automatically alerts the Master or another qualified person if for any reason the OOW becomes incapable of performing the OOW's duties. This process is subdivided in different alarm stages which primarily try to alert the OOW via visual and audible alerts.



APPLICATION

The bridge navigational watch alarm system (BNWAS) monitors bridge activity and detects operator disability that could lead to marine accidents. The system monitors the awareness of the Officer Of the Watch (OOW) and automatically alerts the Master or another qualified person if for any reason the OOW becomes incapable of performing the OOW's duties. This process is subdivided in different alarm stages which primarily try to alert the OOW via visual and audible alerts.

In case the BNWAS does not receive any evidence of life, the alert will be transferred to the selected backup Officer Of the Watch (OOW) cabin(s). Assuming that no acknowledgement has been triggered either, the ultimate alert stage will activate alarm devices in public area. Additionally, the BNWAS provides the OOW with a means of calling for immediate assistance if required (emergency call).

compact connecting module

intuitive control philosophy

easy to install



dimmable



key-switch



MED type approved



system voltage: 24 DCV nominal
(18 ... 31,2V)

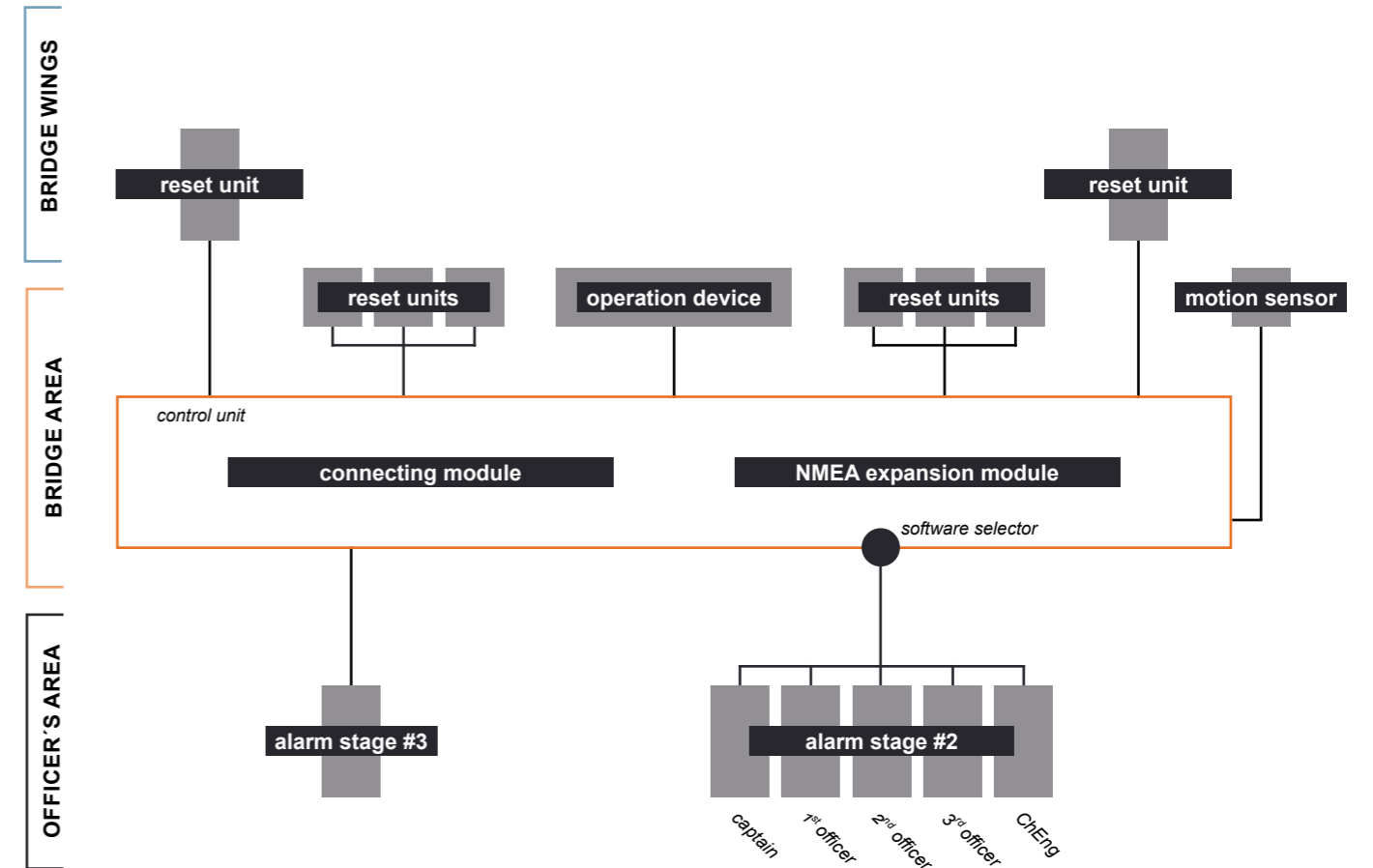


IEC 62616

DATA & FEATURES

- 2 x 16 character coloured light display shows all relevant device and alarm states
- rotary encoder with integrated push button - simple but effective for user
- integrated buzzer, eight individual sound characteristics & volume adjustment
- main supply / back-up supply failure indication
- connecting module designed for TS 35 terminal rail
- emergency call facility (manual release & alarm transfer)
- NMEA bi-directional serial interface (e.g. for VDR link or alarm transfer from BAM/CAM)
- MED Type Approved (wheel marked) certificate no.: DNV-GL MEDB000034A
- MED Type Approved (wheel marked)
 - IEC 62288 Ed. 2.0 (2014-07)
 - IEC 62616(2010) incl. IEC 62616 Corr. 1 (2012)
 - IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008)
 - IEC 61162-1 ed4.0 (2010-11) and ed5.0 (2016-08)
 - IEC 61162-2 ed1.0 (1998-09)
 - IEC 62923-1/2

SAMPLE SYSTEM **large vessels**



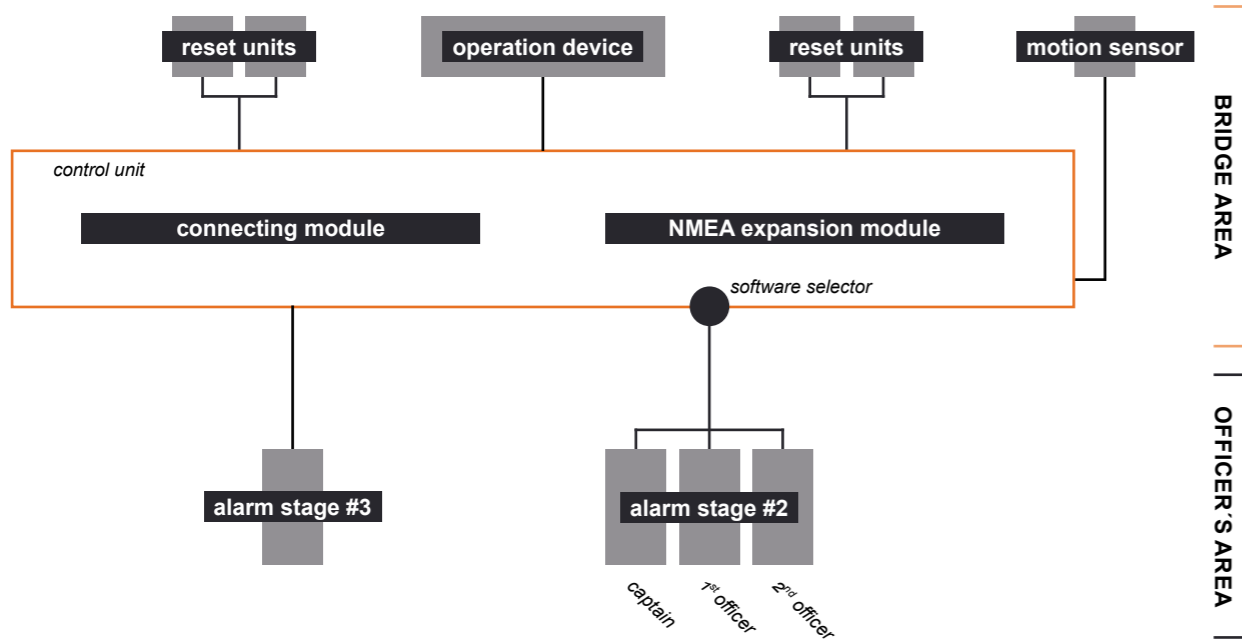
in- / outputs of the console

automatic start from autopilot
(dry contact or NMEA)

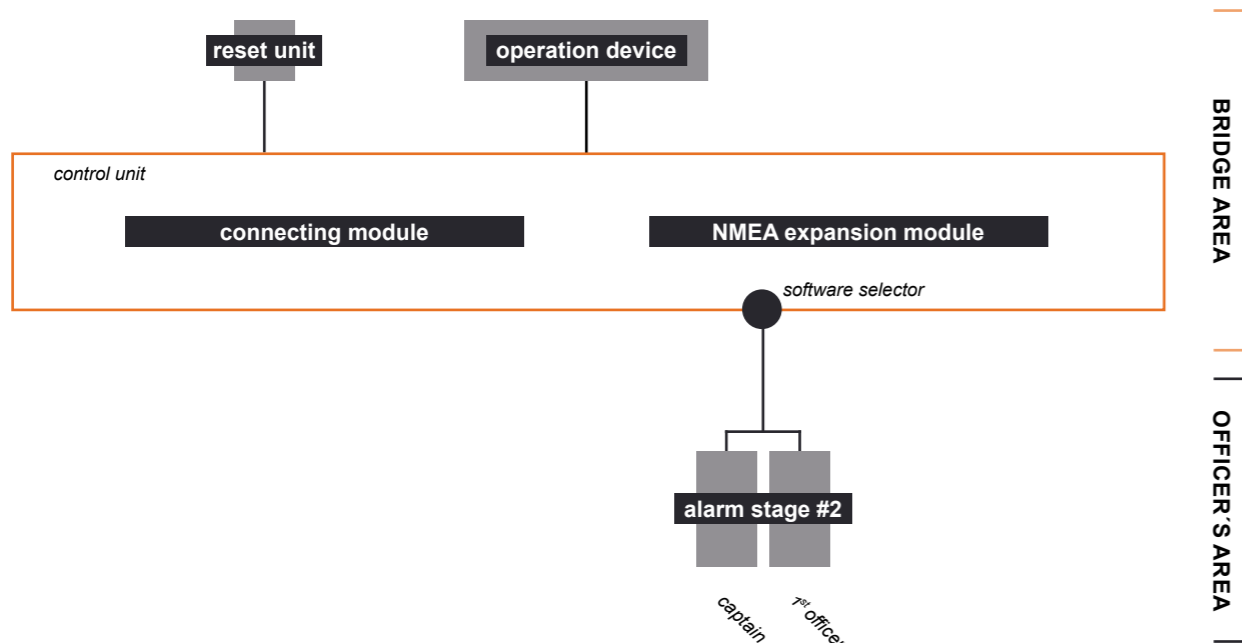
emergency call &
alarm transfer inputs
(dry contact or NMEA)



SAMPLE SYSTEM **medium vessels**



SAMPLE SYSTEM **small vessels**



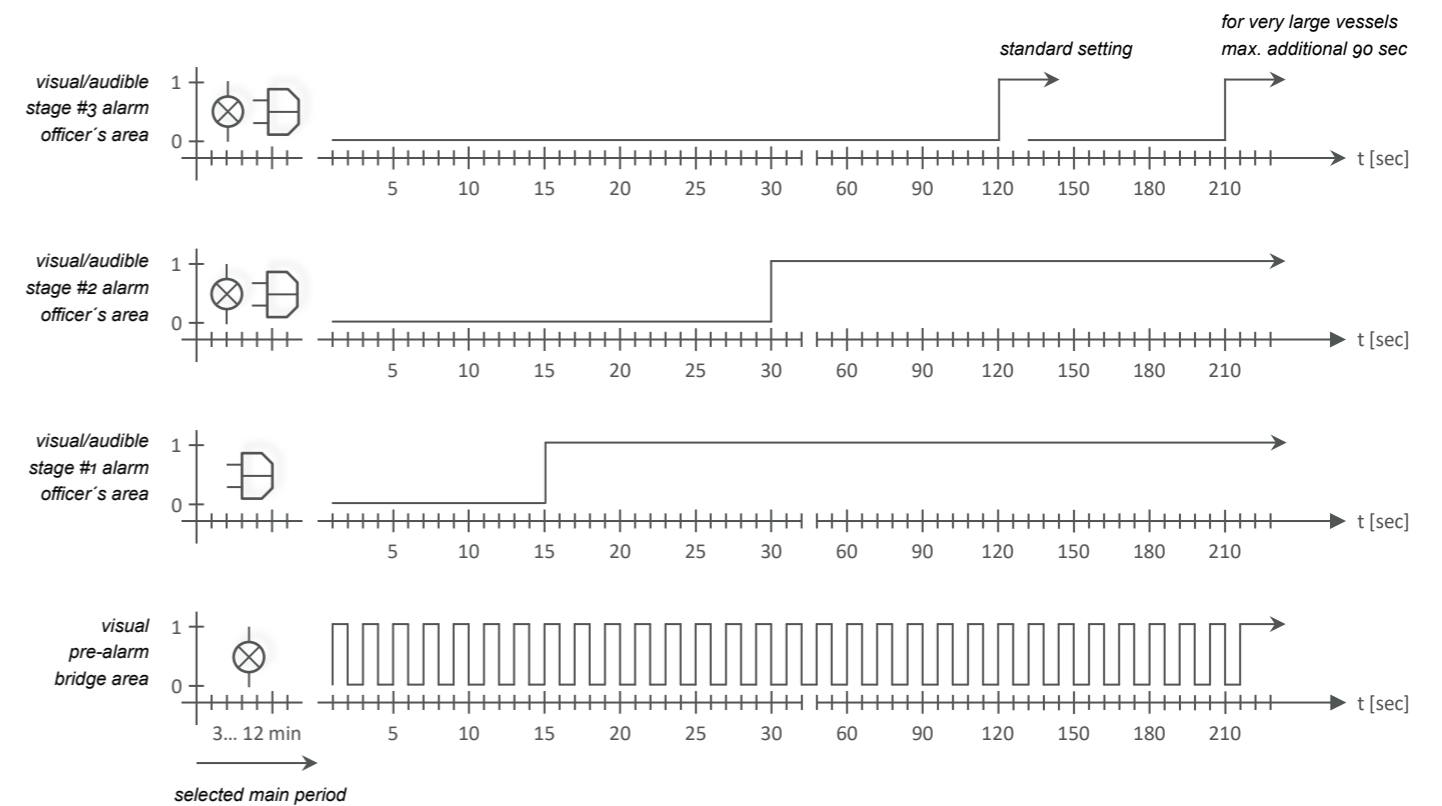
ADDITIONAL INFORMATION

MSC 86 legal background

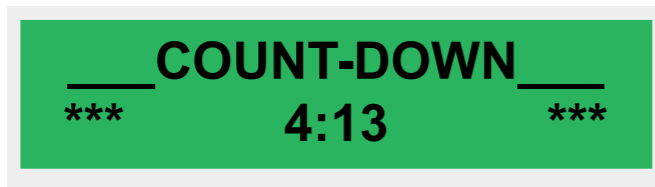
A Bridge Navigational Watch Alarm System (BNWAS) has to be installed as follows:

- Ships of 150 gross tonnage and upwards and passenger ships irrespective of size constructed on or after 1st July 2011;
- Passenger ships irrespective of size constructed 1st July 2011, not later than first survey after 1st July 2011;
- Ships of 3,000 gross tonnage and upwards constructed before 1st July 2011, not later than the first survey after 1st July 2012;
- Ships of 500 gross tonnage and upwards but less than 3,000 gross tonnage constructed before 1st July 2011, not later than the first survey after 1st July 2013;
- Ships of 150 gross tonnage and upwards but less than 500 gross tonnage constructed before 1st July 2011, not later than the first survey after 1st July 2014;

TIME TABLE



ALARM STATES



non alarm condition

PERIPHERY EQUIPMENT

WATCH ALARM SYSTEM *basic*

771170



BNWAS | le guardian 2025

- le guardian 2025 connecting module LCM 210.24.0.0
- le guardian 2025 operating device LOD 210.24.0.0
- 15 pole system cable, l=3m

NMEA EXPANSION MODULE

771172



BNWAS | NMEA 210.24.0.0

- incl. software selector switch for selectable stage #2 alarm
- NMEA interface to VDR
- NMEA interface to BAM/CAM

WATCH ALARM RESET

770040



BNWAS | WAR 220.1.0.0

- illuminated (dimnable)
- push button
- 24 VDC power supply
- IP 67

ALARM PANEL STAGE #2

770107



BNWAS | WAP 220.2.0.0

- alarm for officer's cabin with buzzer
- flush mounted
- 24 VDC power supply
- IP 23; 80 dB(A)

PERIPHERY EQUIPMENT

ALARM PANEL STAGE #3

770106



BNWAS | WAP 220.4.0.0

- for officer's area (corridor)
- triangle light & sounder 64-111 dB(A)
- 24 VDC power supply
- IP 65

STAGE #1 ALARM EXTERNAL BUZZER

770117



BNWAS | WAB 220.2.0.0

- 85 dB(A)
- 24 VDC power supply
- IP 65
- installation hole 22,5mm

WATCH ALARM RESET WALL BOX

770041



BNWAS | WAR.220.2.0.0

- 24 VDC power supply
- IP 65
- dimension 122 x 122 x 90mm
- M32 x 1,5 cable gland

STAGE #1 ALARM RESET WALL BOX *with buzzer*

770045



BNWAS | WAR 220.2.1.0

- 24 VDC power supply
- IP 65; 85 dB(A)
- dimension 122 x 122 x 90mm
- M32 x 1,5 cable gland

FAILURE ALARM PANEL

770423



BNWAS | FAP 220.1.0.0

- incl. test/reset facility
- 24 VDC power supply
- buzzer 85 dB(A)

ILLUMINATED RESET P/B *with wall box*

770429



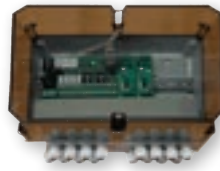
BNWAS | WAR 220.3.0.0

- IP 23 (indoor)
- connecting type: terminal block

PERIPHERY EQUIPMENT

WALL BOX FOR LCM

770317



BNWAS | WBC 210.1.0.0

- 360 x 250 x 165mm
- IP 23
- 16ea M25 cable glands

WATCH ALARM BOX *with buzzer*

770051



BNWAS | WAB 220.1.0.0

- 24 VDC
- IP 65
- 85 dB(A)

WATCH ALARM RESET *illuminated push button*

770119



BNWAS | WNAR 220.1.0.1

- 24 VDC
- IP 23
- connecting type: screws

PIR MOTION SENSOR

770305



BNWAS | WMS 220.2.0.0

- with swivel bracket
- incl. electronic module

STAGE #2 ALARM PANEL

770318



BNWAS | WAP 220.5.0.0

- for officer's cabin with buzzer
- 85 dB(A)
- bulkhead mounted
- 24 VDC + IP 23

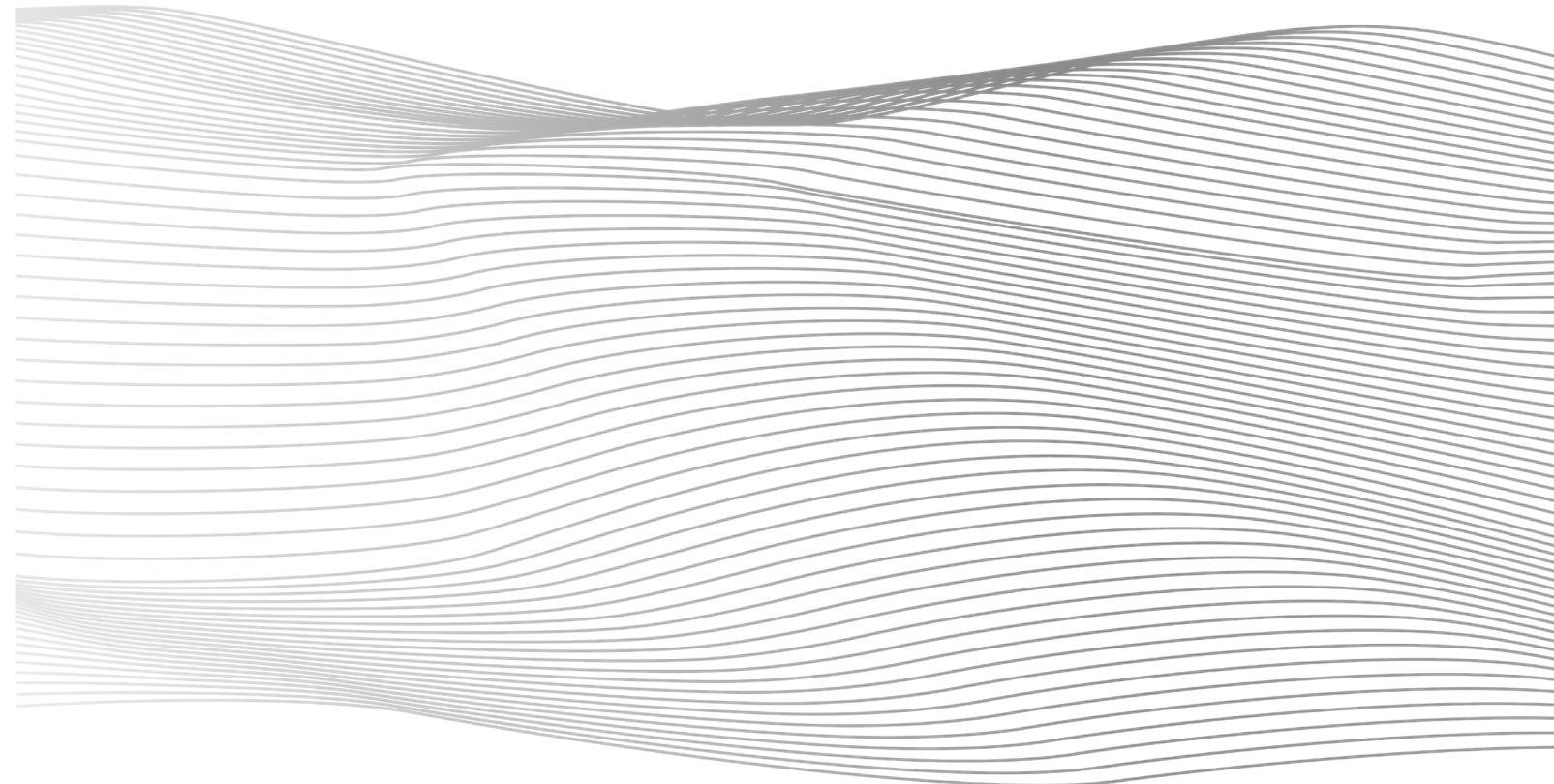
SWIVEL MOUNTING BRACKET

770309



BNWAS | WMB 210.1.0.0

- for operating device
- attachment on desk/wall/ceiling



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