



EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00003R1
Revision No:
1

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Bridge Navigational Watch Alarm System (BNWAS)

with type designation(s)
HLD-BNWS600

Issued to

Jiangsu Highland Integration Technology Co.,Ltd.
Nantong, Jiangsu, China

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2022/1157**,

item No. MED/4.57. SOLAS 74 as amended, Regulations V/18 & V/19, IMO Res. A.694(17), IMO Res. MSC.128(75), IMO Res. MSC.191(79), IMO Res. MSC.302(87), IMO MSC.1/Circ.1474

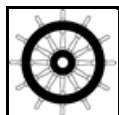
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2028-09-17**.

Issued at **Hamburg** on **2023-09-18**

DNV local station:
Dalian NB & CMC

Approval Engineer:
Jörg Rebel



Notified Body
No.: **0098**

for DNV SE

Christine Mydlak-Röder
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: MED 201.DEU

Revision: 2022-02

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Product description

The Bridge Navigational Watch Alarm System (BNWAS), type HLD-BNWAS600 consists of the following equipment:

- | | |
|--------------------------|------------|
| 1. Operation Unit | HLD-OPU600 |
| Software version: 2.0.x | |
| 2. Interface Unit | HLD-INU600 |
| Software version: 2.0.x | |
| 3. Alarm Unit | HLD-ALU600 |
| 4. Reset Unit | HLD-REU601 |
| 5. Waterproof Reset Unit | HLD-REU602 |

Options:

- | | |
|--------------------------|------------|
| 1. Motion Detection Unit | HLD-MDU600 |
| 2. Visual Alarm Unit | HLD-VAU600 |
| 3. Battery Unit | HLD-BAU600 |

Documentation:

HLD-BNWAS 600 Operation Manual Version 2.x and HLD-BNWAS 600 Installation Manual Version 2.x

Application/Limitation

None

Type Examination documentation

Test reports:

HLD9600CG (IEC62616, IEC62288, IEC61162series), SITIIAS A12-064-ZC (IEC60945),
DNV-08-29-HLD-BNWAS600 V01B

Manuals:

HLD9600AZ V2.1 (Installation), HLD9600SS2 V2.1 (Operation)

Tests carried out

- | | |
|------------------------------------|---|
| • Environmental and EMC testing: | IEC 60945 (2002) incl. Corrigendum 1 (2008) |
| • Interface testing: | IEC 61162-1 (2016) |
| • Presentation testing: | IEC 62288 (2021) |
| • Bridge alert management testing: | IEC 62923-1 (2018) and IEC 62923-2 (2018) |
| • Performance testing: | IEC 62616 (2010) incl. Corrigendum 1 (2012) |

Marking of product

According to IEC 60945, Sect.4.9:

The product to be marked with following information, where practicable:

- Identification of the manufacturer,
- Equipment type number or model identification under which it was type tested,
- Serial number of the unit,
- Compass safe distance.

Alternatively, the marking may be presented on a display at equipment start-up, and in case of fixed equipment compass safe distance may be given in the equipment manual.

END OF CERTIFICATE