

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

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

**This is to certify:**

**That the Radar equipment CAT 2**

with type designation(s)  
**HLD-RADAR 900**

Issued to

**Beijing Highlander Digital Technology Co., LTD**  
**Beijing, China**

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

Regulation **(EU) 2017/306**,  
**item No. MED/4.35. SOLAS 74 as amended, Regulations V/18 & V/19, IMO Res. A.278(VIII),**  
**IMO Res. A.694(17), IMO Res. MSC.191(79), IMO Res. MSC.192(79), IMO Res. MSC.302(87),**  
**ITU-R M.1177-4 (04/11)**

Manufacturers authorised representative  
**ROCKSON Automation GmbH**  
**Wittland 2 – 4**  
**24109 Kiel, Germany**

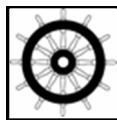
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2022-04-05**.

Issued at **Hamburg** on **2017-04-06**

DNV GL local station:  
**Tianjin**

Approval Engineer:  
**Harald Bluhm**



Notified Body  
No.: **0098**

for **DNV GL SE**

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**Sven Dudszus**  
**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), as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment", signed February 27th, 2004.

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance 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 GL 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.



## Product description

The HLD-RADAR 900 comprising of the following equipment:

1. RADAR Computer: HLD-MCU 200, or HLD-MCU 600  
Software: Windows7 Operating System  
Software version: 1.x
2. Display unit:  
Monitor TFT 24", Type: HLD-DU134, or, HLD-DU140 or  
Monitor TFT 26", Type: HLD-DU135, or, HLD-DU141
3. Power Conversion Unit: HLD-PCU600
4. Human Interface Unit: HLD-IU600  
Software version: 1.x
5. Radar Antenna: HLD-AT106, or, HLD-AT108, or, HLD-AT112
6. Radar Transceiver: HLD-TU125, or, HLD-TU130  
Software version: 1.x

Optional equipment:

7. UPS  
UPS (SURT1000 XLIM) Type: PC SMART-UPS RT 1000VA 230V  
UPS (SURTD2200 XLIM) Type: APC SMART-UPS RT 2200VA 230V
8. Lan Switch: HLD-LS600
9. Signal Convert Unit: HLD-SCU600  
Software version: 1.x

## Type Examination documentation

9065-16-39255-62388 - IEC 62388  
9065-16-39255-62288 - IEC 62288  
60945 test report-SIPAI - IEC 60945  
Documentation:  
OPERATION MANUAL HLD1800CZ V1.x  
INSTALLATION MANUAL HLD1800AZ V1.x

## Tests carried out

IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008), IEC 61162 series: IEC 61162-1 ed4.0 (2010-11), IEC 61162-2 ed1.0 (1998-09), IEC 61162-450 ed1.0 (2011-06), IEC 62388 Ed. 2.0 (2013), IEC 62288 Ed. 2.0 (2014-07).

## Marking of product

The manufacturer and Type Designation to be applied to the equipment in a clearly visible location and in addition the equipment shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.