DNV·GL

Certificate No:
MEDB00004X6

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 Voyage data recorder (VDR) and Simplified voyage data recorder (S-VDR)

with type designation(s)
HLD-VDR600 and HLD-SVDR600

Issued to
Beijing Highlander Digital Technology Co., LTD
Beijing, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773,**
item No. MED/4.29. SOLAS 74 as amended, Regulations V/18, V/20 & X/3, IMO Res. A.694(17), IMO Res. MSC.36(63), IMO Res. MSC.97(73), IMO Res. MSC.191(79), IMO Res. MSC.302(87), IMO Res. MSC.333(90)
item No. MED/4.47. SOLAS 74 as amended, Regulation V/20, IMO Res. A.694(17), IMO Res. MSC.163(78), IMO Res. MSC.191(79), IMO Res. MSC.302(87)

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

This Certificate is valid until **2024-07-09**.

Issued at **Hamburg** on **2019-07-10**

DNV GL local station:
Tianjin

Approval Engineer:
Jörg Rebel

Notified Body
No.: **0098**

for **DNV GL SE**

Gerhard Aulbert
Head of Notified Body

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

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Job Id: **344.1-008925-1**
Certificate No: **MEDB00004X6**

Product description

The voyage data recorder HLD-VDR600 and simplified voyage date recorder HLD-SVDR600 consist of following equipment:

Component	*Type*	*Software version*	
Main Unit (MU) including	HLD-MU600	2.x	
one Long-term Data Recording unit (LRU) (opt. for S-VDR)	HLD-LRU600	2.x	
and Reserve Power Source (RPS)	HLD-RPS600		
Serial Data Acquisition Unit (DAU)	HLD-DAU600	2.x	
Non-Standard Data Acquisition Unit (NAU) (opt. for S-VDR)	HLD-NAU600	2.x	
Video Acquisition Unit (VAU)	HLD-VAU600	2.x	
Fixed Protective Data Recording Capsule (PDC)	HLD-PDC600	2.x	
with Underwater Locating Device (ULD)	HLD-ULD601		OR
	HLD-ULD602		OR
	HLD-ULD603		
Operator Unit (OPU)	HLD-OPU600	2.x	
Float-free Data Recording Capsule (FFC) (opt. for S-VDR)	HLD-FFC600	2.x	
with Battery Pack (BTP)	HLD-BTP600		
and Hydrostatic Release Unit (HRU)	HLD-HRU600		OR
Float-free Data Recording Capsule (FFC) (opt. for S-VDR)	HLD-FFC660	2.x	
with Battery Pack (BTP)	HLD-BTP660		
and Hydrostatic Release Unit (HRU)	HLD-HRU660		
and Cable Cutter	HLD-CCU660		
Capsule Junction Box (CJB)	HLD-CJB600		
Indoor Microphones (MIC)	HLD-MIC600		
Outdoor Microphones (MIC)	HLD-MIC610		

Playback Software	Version 2.x
Configuration Software	Version 2.x

Application/Limitation

None

Type Examination documentation

Tests carried out

- Performance testing for VDR: IEC 61996-1 (2013) incl. Corrigendum 1 (2014)
- Performance testing for S-VDR: IEC 61996-2 (2007)
- Environmental testing: IEC 60945 (2002) incl. Corrigendum 1 (2008)
- Serial interface testing: IEC 61162-1 (2016), IEC 61162-2 (1998) and IEC 61162-450 (2011) with Am.1 (2016)
- Presentation of navigational information: IEC 62288 (2014)

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.

According to Article 10 of the Council Directive (MED):

- Wheel mark to be affixed visibly, legibly and indelibly to the product or to its data plate and, where relevant, embedded in its software. Where that is not possible or not warranted on account of the nature of the product, it shall be affixed to the packaging and to the accompanying documents.
- Wheel mark to be affixed at the end of the production phase.

For specific products, manufacturers may use an appropriate and reliable form of electronic tag instead of, or in addition to, the wheel mark.

END OF CERTIFICATE