

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB000033R
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 GNSS Equipment (GPS)

with type designation(s)
NGR-3000

Issued to

New Sunrise Co.,Ltd.
Suzhou City, Jiangsu, China

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

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

item No. MED/4.63 SOLAS 74 as amended, Reg. V/18, 19, X/3, IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC Code) 13, IMO Res.A.694 (17), IMO Res. MSC.191(79), 302(87), 112(73), 113(73), 114(73), 233(82), 379(93)

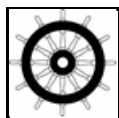
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2027-10-31**.

Issued at **Hamburg** on **2022-11-01**

DNV local station:
Shanghai

Approval Engineer:
Jörg Rebel



Notified Body
No.: **0098**

for **DNV SE**

Christine Mydlak-Roeder
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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

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 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.



Product description

The GPS NGR-3000 consists of the following components:

1. Main unit type NGR-3000 main unit software version 2.xx
2. Antenna type NGA100
3. Antenna cable type 10m RG58, or 20m RG58, or 30m RG212

Optional equipment:

1. DGPS beacon type NDG-100
2. Flush mount bracket type NFB700

User manual: NGR-3000 UM.E 20220613-06

Application/Limitation

The NGR-3000 incorporates a GPS receiver. It is to be installed according to manufacturer's instructions.

Type Examination documentation

Test Reports: A17-009-WT (IEC 60945), 2017F34-30-1181943001 (IEC 6108-1), 9065 17 18690 gps 62288 (IEC 62288), 9065 17 18690 gps_61162 (IEC 61162 series), NSR-NGR-3000-TEST220526P Ed.4 (IEC 62923-1/-2)

Tests carried out

- Environmental and EMC testing: IEC 60945 (2002) incl. Corrigendum 1 (2008)
- Interface testing: IEC 61162-1 (2016) and IEC 61162-2 (1998)
- Presentation testing: IEC 62288 (2021)
- Bridge alert management testing: IEC 62923-1 (2018) and IEC 62923-2 (2018)
- Performance testing: IEC 61108-1 (2003)

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