



Marine & Offshore

Certificate number: 54746/B0 MED File number: NAV18/50649/1

Item number: MED/4.6

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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Notified Body 2690 - MARINE EQUIPMENT DIRECTIVE 2014/90/EU

EC TYPE EXAMINATION CERTIFICATE

as per Module B of Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations and Commission Implementing Regulation (EU) 2020/1170 of 16 July 2020

This certificate is issued to:

Skipper Electronics AS

Oslo - NORWAY

for the type of product

ECHO-SOUNDING EQUIPMENT

Skipper ESN200

Requirements:

SOLAS 74 Convention as amended, Regulations V/18, V/19 and X/3

IMO Res. MSC.36(63) -(1994 HSC Code)- as amended, 13

IMO Res. MSC.97(73) -(2000 HSC Code)- as amended, 13

IMO Res. A.224(VII) IMO Res. A.694(17)

IMO Res. MSC.74(69) amended by MSC.115(73), Annex 4

IMO Res. MSC.191(79), MSC.302(87) ISO 9875:2000 + /Corr. 1:2006, IEC 60945 (2002) + /Corr. 1 (2008),

IEC 61162 series: IEC 61162-1 (2016) - IEC 61162-2 ed1.0 (1998-09) - IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11)

and am2 ed. 1.0 (2014-07) - IEC 61162-450:2018,

IEC 62288 Ed. 2.0 (2014-07).

IEC 62923-1:2018, IEC 62923-2:2018.

This certificate is issued on behalf of the French Maritime Authorities to attest that Bureau Veritas Marine & Offshore did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations.

This certificate will expire on: 23 Aug 2026

For Bureau Veritas Marine & Offshore Notified Body 2690,

At BV OSLO, on 23 Aug 2021, Rune MARSTEIN

Rune Marstein



This certificate does not allow to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark ①) to the products corresponding to this type. To this end, the production-control phase module (D, E or F) of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.

This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. Bureau Veritas Marine & Offshore is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

Skipper ESN200 is echo sounding equipment for marine application.

Product part	Comment
Graphic display ESN200-SB	SW version: SW-M008-1.1.X.X
	HW version: CU-M001-ZB
JB70E2-SA	SW version: SW-M010-1.1.X.X
ETS50200	Dual 50 and 200kHz Skipper transducer
ETN050	50kHz Tokin Transducer
ETN200S	200kHz Tokin Transducer (small)
ETN200	200kHz Tokin Transducer
ETS050	50 kHz Skipper transducer
ETS200	200kHz Skipper transducer
ETN038	38kHz Transducer
200B-8B	Furuno 200kHz transducer
	<u>.</u>
IR31DIM	
IR301	
CD401MR	
Moxa EDS-408A-MM-ST.	
	ESN200-SB JB70E2-SA ETS50200 ETN050 ETN200S ETN200 ETS200 ETS200 ETS050 ETS200 ETN038 200B-8B IR31DIM IR301 CD401MR

⁻X is non significant changes.

Sitep Italia ESN200, Kelvin Hughes ESN200, Marine Technologies ESN200, Norwegian Control Systems ESN200

2. DOCUMENTS AND DRAWINGS:

- 2.1 ESN200 Navigation Echo Sounder brochure, Ver. 2018-09-29, dated 29-09-2018.
- 2.2 ESN200 Operation and Installation Manual, No. DM-G005 rev 2111 dated 22-07-2021.
- 2.3 Multi-PanelPC 9inch touch display Datasheet, dated 21-02-2018.
- 2.4 Multi-PanelPC 9inch touch display Drawings, No. CU-M001 Rev. 1246, dated 10-12-2014.
- 2.5 ESN200 Echosounder Risk Assesment.

3. TEST REPORTS:

- 3.1 Nemko Test report No. E18215.00, dated 27-09-2018.
- 3.2 Nemko Test report No. E14223.00, dated 15-01-2015.
- 3.3- Skipper Performance test report for ESN200 Dual channel echosounder, dated 24-10-2018.
- 3.4 Skipper ESN200 Dual channel echosounder BAM compliance test report dated 09/06/2021. Tests witnessed by Society Surveyor.
- 3.5 Moxa EDS-408A-MM-ST Test Report Ref: TL18024 (MS TESTING) dated 04/01/2019.
- 3.6 Moxa EDS-408A-MM-ST Test Report No: 17 A0322A0322R-ITCEP16V00 (DEKRA) dated 16/07/2018.

4. APPLICATION / LIMITATION:

- 4.1 As per requirements of Regulations stated on front page of this certificate.
- 4.2 IEC 61162-2 and IEC 61162-3 are not applicable.
- 4.3 Only Hardware and Software successfully tested together in compliance with the regulations as referred to in page one, according to the declaration of the manufacturer are covered by this certificate.
- 4.4 The approved equipment (ESN200):
- embeds only BAM function type P;
- if installed on a BAM compliant bridge, shall use IEC 61162-450 digital interfaces for BAM harmonized presentation of its alerts within Navigation Cluster and shall not use non-BAM compliant alert communications, unless allowed by the Administration.

⁻The certificate is also valid for the echo-sounding equipment with the type designations :

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5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - This certificate alone does not allow the applicant to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark) to the products corresponding to this type. To this end, the production-control phase module D Production Quality Assurance or module E Product Quality Assurance or module F Product Verification of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a Notified Body.

5.2 - For information concerning the production phase modules, **Skipper Electronics AS** has declared the following manufacturing site:

Skipper Electronics AS Enebakkveien 150, Ryen 0612 Oslo NORWAY

6. MARKING OF PRODUCT:

Reference is made to MED 2014/90/EU chapter 2.

In particular Article 10.3 specifies that the wheelmark shall be followed by the identification number of the Notified Body involved in the production control phase (module D, E or F) and by the year in which the mark is affixed (4 digits or last 2 digits).

7. OTHERS:

7.1 - It is **Skipper Electronics AS**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This certificate supersedes EC Type Examination Certificate n° 54746/A0 MED issued on 23/11/2018 by the Society.

*** END OF CERTIFICATE ***