



# Bundesrepublik Deutschland

Federal Republic of Germany

## BSH-Cert

Benannte Stelle – Navigations- und Funkausrüstung  
beim Bundesamt für Seeschifffahrt und Hydrographie

Notified Body – Navigation and Radiocommunication Equipment  
at the Federal Maritime and Hydrographic Agency



NOTIFIED  
BODY  
0735

### EC TYPE EXAMINATION (MODULE B) CERTIFICATE

This is to certify that:

BSH-Cert, specified as a "notified body" under the terms of „Schiffssicherheitsgesetz“ of 09 September 1998 (BGBl. I, p. 2860) modified last 08 March 2012 (BGBl. I, p. 483), did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the Navigation requirements of Marine Equipment Directive (MED) 96/98/EC and the last modification by Directive 2011/75/EC.

Manufacturer **Fugro Seastar A/S**  
 Address **Hoffsveien 1C, 0275 Oslo, NORWAY**

Applicant **Fugro Seastar A/S**  
 Address **Hoffsveien 1C, 0275 Oslo, NORWAY**

Annex A.1 Item (No & item designation) **4.41 Transmitting heading device THD (GNSS method)**

Product Name **Marinestar Manoeuvring System**

Trade Name(s) **----**

#### Specified Standard(s)

IMO Resolution MSC.116(73)	ISO 22090-3 Ed.1.0, 2004, incl. Corr. 1, 2005
IMO Resolution A.694(17)	IEC 60945 Ed.4.0, 2002 incl. Corr. 1, 2008
IMO Resolution MSC.191(79)	IEC 61162-1 Ed.4.0, 2010
	IEC 61162-2 Ed.1.0, 1998
	IEC 62288 Ed.1.0, 2008

Based on the Directive 2010/68/EC, additional applied version: Directive 2011/75/EC  
This certificate remains valid unless cancelled, expired or revoked.

Date of issue: **07 May 2012**

Issued by: **BSH-Cert**

Bernhard-Nocht-Str. 78, 20359 Hamburg, Germany

Expiry date: **31 December 2016**

Notified body 0735

Certificate No.: **BSH/46122/4411362/12**

This certificate consists of 2 pages.



Kar-Jens Schulz-Reifer



**Components necessary for operation:**

Designation	Type designation	Software
DGNSS receiver	9205-GNSS Receiver	
Isolating Power and Data unit	Fugro IPDU	
PCS server	enix 2000	Software version 2.0.7.x
Vertical Gyro	MS-350CA-300	
DGNSS antenna	Trimble GA 810 <i>or</i> Zephyr Model 2 Rugged <i>or</i> Alison AD491	
Monitor	Hatteland JH 15T17 MMD-DA1	
Keyboard	NSI KSML 92S0001-W-MC1	
Ethernet Switch	Moxa EDS-408A-3M-ST-T	

**Approval Documentation:**

Test Report No.: BSH/4612/4411362/12 (ISO 22090-3)

Test Report No.: BSH/4612/4411362/12-3 (IEC 62288)

Assessment Report No.: BSH/4612/4411362/12-4 (IEC 61162 series)

User Manual and Installation Guide version 2.9

**Places of production:**

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**Limitations on the acceptance or use of the product:**

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**Notes:**

The manufacturer shall inform BSH-Cert, as the notified body, of any modifications to the type-tested product(s) that may affect compliance with the requirements or conditions laid down for use of the product(s).

In case the specified regulations or standards are amended during the validity of this certificate, the product(s) must be re-certified before being placed on board vessels to which such amended regulations or standards apply.

The Mark of Conformity (wheelmark) may only be affixed to the type approved equipment, and a Manufacturer's Declaration of Conformity may only be issued, if the product quality system fully complies with the Marine Equipment Directive and is certified by a notified body against ANNEX B module D, E, or F of the Directive.

**Notice on legal remedies available:**

Objection to this document may be filed within one month after notification. The objection must be filed in writing to, or put on record at, Federal Maritime and Hydrographic Agency, Bernhard-Nocht-Str. 78, 20359 Hamburg, Germany