



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 23 January 2014 (BGBl. I, p. 78), 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 2013/52/EU.

Manufacturer **NetWave Systems B.V.**
Address **Blauw-roodlaan 100, 2718 SJ Zoetermeer, THE NETHERLANDS**

Applicant **NetWave Systems B.V.**
Address **Blauw-roodlaan 100, 2718 SJ Zoetermeer, THE NETHERLANDS**

Annex A.1 Item (No & item designation) **4.47 Simplified voyage data recorder (S-VDR)**

Product Name **VDR-100G3S**

Trade Name(s) **Rutter VDR-100G3S, NetWave VDR-100G3S
NetWave / Rutter VDR-100G3S**

Specified Standard(s)

IMO Resolution MSC.163(78)	IEC 61996-2 Ed.1.0, 2007
IMO Resolution MSC.214(81)	IEC 60945 Ed.4.0, 2002 incl. Corr.1, 2008
IMO Resolution A.694(17)	IEC 61162-1 Ed.4.0, 2010
IMO Resolution A.861(20)	IEC 61162-2 Ed.1.0, 1998
IMO Resolution MSC.191(79)	IEC 62288 Ed.1.0, 2008

Based on the Directive 2012/32/EU.

This certificate remains valid unless cancelled, expired or revoked.

Date of issue: **20 February 2014**

Issued by: **BSH-Cert**

Expiry date: **19 February 2019**

**Bernhard-Nocht-Str. 78, 20359 Hamburg, Germany
Notified body 0735**

Certificate No.: **4581/001/4472594/14**

This certificate consists of 4 pages.



Siegel

Kai-Jens Schulz-Reiter



Components necessary for operation:

See Annex to EC type examination (Module B) certificate No.: 4581/001/4472594/14

Approval Documentation:

Item	No. / Version
VDR-100G3/G3S Installation and Maintenance Manual	RUT-TD-10-001 Rev.1.4
VDR-100G3/G3S Operation Manual	RUT-UM-10-002 Rev.1.2
VDR-100G3/G3S Data Recovery Manual	RUT-UM-02-003 Rev.1.1

Places of production:

Limitations on the acceptance or use of the product:

The operation and alarm unit (RUT-01053) only used for service purposes, there were no tests performed after the display test standard IEC 62288.

Capsule:

- Memory size minimum 4Gbyte if a high resolution radar (1600 x 1200) is connected

Video input connections:

Maximum number of radars	Resolution of the screen
4	1280 x 1024
3	1600 x 1200 or less

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



**ANNEX TO
EC TYPE EXAMINATION (MODULE B) CERTIFICATE**

No.: 4581/001/4472594/14

Components necessary for operation:

Designation	Type designation
Data Processing Unit	RUT-01044
Audio Module	RUT-01004-08 (8 ch) or RUT-01004-12 (12 ch) or RUT-01004-16 (16 ch) RUT-01050-08 (8 ch) or RUT-01050-12 (12 ch) or RUT-01050-16 (16 ch)
NMEA Module	RUT-01029
Video Module	RUT-01005
Operation and Alarm Unit	RUT-01053
USB Memory Stick	RUT-02297
Indoor Microphone	RUT-01019
Outdoor Microphone	RUT-01018
Final Recording Medium (Fixed capsule)	L3 HVR-01-XXX-XX or L3 SVR-01-XXX-XX or L3 HVR-02-XXX-XX or L3 SVR-02-XXX-XX or L3 HVR-03-XXX-XX or L3 SVR-03-XXX-XX or L3 HVR-03-XXX-40 (4GB) or L3 SVR-03-XXX-40 (4GB) or RUTTER FRM RUT-02447 or
Final Recording Medium (Float free capsule S-VDR) ACR or Tron S-VDR Capsule or	RLB-35MC or RUT-02087 (2GB) or RUT-02665 (4GB) or
Underwater Locating Device	Novega PT9 or Dukane DK485 or Benthos ELP362D

Optional components:

Designation	Type designation
FRM Junction Box	RUT-01010
Remote Storage Module	RUT-01055
Remote Storage Module Power Supply	RUT-01056
DataAnalog Interface	RUT-01014
DataDiscrete Interface	RUT-01015
DataSynchro / DataGyro Interface	RUT-01033

Approval documentation:

Item	No. / Version
Test report IEC61996 Bundesamt für Seeschifffahrt und Hydrographie (BSH) Audio and video quality test	6543/080332/2004
CSA International Test Report	1591297 May 2005
CSA International Test Report	1691058 March 2006
Test report IEC61996 and IEC61996-2 Bundesamt für Seeschifffahrt und Hydrographie (BSH)	BSH/4612/4290702/07
CSA International Test Report IEC60945	1899881 29.10.2007
CSA International Test Report IEC60945	1973597 20.12.2007
BSH-Bescheinigung Compass Safe Distance	No. 540 22.01.2008
BSH-Bescheinigung Compass Safe Distance	No. 563 04.04.2008
Test report IEC61996-1 / IEC61996-2 Bundesamt für Seeschifffahrt und Hydrographie (BSH)	BSH/4612/4290958/08