

## CERTIFICATE

### EC TYPE- EXAMINATION (MODULE B) ACCORDING TO THE DIRECTIVE 2014/90/EU

**Certificate No: ME-C-0372/B/2/24**

**Notification No of the Certification Body: 0437**

**Date of issue: 29.01.2024**

**Test Report No: ME-R-0372/B/1/24**

**Date of Revision: 29.08.2024**

**Name and Address  
of the Manufacturer:**

**Ocean Voyager Elektronik Sistemleri San. ve Tic.  
Anonim Şirketi  
Güzelyalı Mah. Sahil Blv. No:88/2 Pendik/ İstanbul - Turkey**

**Name and Address of the  
Authorised Representative:**

**NRC Marine Electronics and Services B.V  
Dirk Verheulweg 4 Waddinxveen Q4 2742JR  
Waddinxveen Rotterdam Netherlands**

**Product Type:**

**Voyage Data Recorder (VDR) DR-100**

**Item No:**

**MED/4.29 Voyage Data Recorder (VDR)**

**Regulations & Standards:**

**2014/90 EU, (EU) 2023/1667, SOLAS 74 Reg. V/18,  
SOLAS 74 Reg.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), EN 61162-1:2016,  
EN 61162-2:1998, 61162-3:2008+A1:2010+A2:2014,  
EN 61162-450:2018, EN 61996-1:2013+A1:2021,  
EN 62288:2022, EN IEC 62923-1:2018, EN IEC 62923-2:2018**

**Expiry Date of the Certificate:**

**28.01.2029**

**USCG Approval Category Nr:**

**165.150**

#### **DECLARATION**

*MIRTEC S.A. certifies that the type mentioned above satisfies the provisions of the Directive 2014/90/EU.*

*For the conformity assessment to be complete, the marine equipment must be subjected to an additional procedure, as laid down in Annex B of the Directive (Modules D, E or F).*

*The applicant must inform the notified body of all modifications to the approved marine equipment.*

*"This equipment is covered by the scope of the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment signed February 27th, 2004 and amended by Decision No.1/2008 dated February 18th, 2019 according to U.S. Coast Guard approval category <165.150>."*

*"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) as allowed by the MED."*

**ANNEX:** List of relevant parts of technical documentation

**For MIRTEC S.A.**



Product  
Certification  
Cert. No 27

Digitally signed by

*Athanasios Stamou*

Director



**For the Evaluation Dpt.**

Digitally signed by

*Kleomenis Papadopoulos*

Mechanical Engineer

**Annex to**

**Marine Equipment Directive Module B**

**Type Examination Certificate Nr: ME-C-0372/B/2/24**

**Description of Product:** MED/4.29 Voyage Data Recorder (VDR)

**Model :** Voyage Data Recorder (VDR) DR-100

**Manufacturer:  
of the Manufacturer:** Ocean Voyager Elektronik Sistemleri San. ve Tic.  
Anonim Şirketi  
Güzelyalı Mah. Sahil Blv. No:88/2 Pendik/ İstanbul-  
Turkey

**Name and Address of the  
Authorised Representative:** NRC Marine Electronics and Services B.V  
Pearl Buckplaats 17 Rotterdam The Netherland  
Waddinxveen Rotterdam Netherlands

**RELEVANT DOCUMENTATION**

**Technical File**

Technical File (Ocean Voyager)

PRODUCT	ABBREVIATION	MODEL
DATA ACQUISITION UNIT	DAU	DR-200
REMOTE CONTROL UNIT	RCU	DR-206
DIGITAL-ANALOG-SERIAL UNIT	DAS	DR-212
DIGITAL INTERFACE UNIT	DIU	DR-209
ANALOG INTERFACE UNIT	AIU	DR-208
SERIAL INTERFACE UNIT	SIU	DR-207
VIDEO INTERFACE UNIT	VIU	DR-211
AUDIO INTERFACE UNIT	AUDIU	DR-210
INDOOR MICROPHONE UNIT	IMU	DR-201
OUTDOOR MICROPHONE UNIT	OMU	DR-217
VIDEO CONVERTER UNIT	VCU	DR-260
NMEA EXPANDER MODULE	NEM	ONB-1800
FLOAT FREE CAPSULE	FFC	OVM-1000
JUNCTION BOX	JB	DR-116V
FIXED PROTECTIVE CAPSULE	FPC	OVM-6000
JUNCTION BOX	JB	DR-116
UNDERWATER LOCATING DEVICE	ULD	DR-851-90

**Approved Technical Drawing Numbers:**

DRAWING NO	DRAWING NAME	DATE
DR100-0001	SYSTEM CONFIGURATION	22.10.2023
DR100-0002	FPC AND FFC CONNECTION DIAGRAM	22.10.2023
DR100-0003	MICROPHONE CONNECTION DIAGRAM	22.10.2023
DR100-0004	RCU CONNECTION DIAGRAM	22.10.2023
DR100-0005	DAS CONNECTION DIAGRAM	22.10.2023
DR100-0006	BAMS CONNECTION DIAGRAM	22.10.2023
DR100-0007	OPTIONAL UNITS' CONNECTION DIAGRAM	22.10.2023
DR100-0008	VIU CONNECTION DIAGRAM	22.10.2023
DR100-0009	AUDI CONNECTION DIAGRAM	22.10.2023
DR100-00010	DAU POWER CONNECTION DIAGRAM	22.10.2023
DR100-00011	DAU DATA CONNECTION DIAGRAM	22.10.2023
DR100-00012	MICROPHONE DATA CONNECTION DIAGRAM	22.10.2023
DR100-00013	RCU DATA CONNECTION DIAGRAM	22.10.2023
DR100-00014	FPC CONNECTION DIAGRAM	22.10.2023
DR100-00015	FFC CONNECTION DIAGRAM	22.10.2023

**Product Description Document No:** OC.MD.TD.01

**Declaration of Conformity Document No:** DOC/002-VDR / 01

**Carriage and performance requirements for the manufacturer:**

SOLAS 74 Reg. V/20, IMO Res. A.694(17), IMO Res.MSC.36(63)-(1994 HSC Code)13,  
IMO Res.MSC.97(73)-(2000 HSC Code)13, IMO Res.MSC.191(79), IMO Res.MSC.302(87),  
IMO Res.MSC.333(90).

**Test Standards:**

EN 60945:2002 incl. IEC 60945 Corr. 1:2008, EN 61162 series: EN 61162-1:2016 EN 61162-  
2:1998 EN 61162-3:2008 +A1:2010+A2:2014 EN IEC 61162-450:2018, EN 61996-  
1:2013+A1:2021, EN IEC 62288:2022, EN IEC 62923-1:2018, EN IEC 62923-2:2018.

### Test Reports

TEST	REPORT NUMBER	DATE
61996-1:2013+A1:2021	RPT-001-23	16.10-20.10.2023
61162-1:2016	RPT-002-23	17.10-18.10.2023
61162-2:1998	RPT-003-23	17.10-18.10.2023
61162-3:2008+A1:2010+A2:2014	RPT-004-23	18.10-19.10.2023
61162-450:2018	RPT-005-23	18.10-19.10.2023
62288:2022	RPT-006-23	23.10-25.10.2023
61966-4:2000	RPT-007-23	25.10-27.10.2023
62923-1:2018	RPT-008-23	20.10.2023
62923-2:2018	RPT-009-23	20.10.2023
61996-1:2013+A1:2021	AQL-001-23	10.01-29.03.2023
61996-1:2013+A1:2021	AQL-002-23	17.02-23.05.2023
60945:2002 Ed.4	CSD-001-23	22.09-28.09.2023
60945:2002 Ed.4	ÇEV/021/02-23	02.02-27.02.2023
60945:2002 Ed.4	EMI-058/02-23	13.02-27.02.2023

### MARKING OF PRODUCT

The type of designation and name and contact address of the manufacturer shall be affixed visibly, legibly and indelibly to at least one part of the product.

The various equipment shall be marked with serial number.

Safe distance to magnetic compass and power consumption and/or supply voltage may be stated on the label.

All units must be tested according to referred standards and each product must have Declaration of Conformity.

**CONDITIONS OF CERTIFICATION**

1. The product shall be marked and identified as required by the applicable directive and standards.
2. For the conformity assessment to be complete, the marine equipment must be subjected to an additional procedure, as laid down in Annex B of the directive (Modules D, E or F).
3. If the standards applied for the certification of the product according to Marine Equipment Directive are amended during the validity of this certificate, the product shall be re-approved according to the amended standards.
4. The manufacturer shall take all measures necessary so that the manufacturing process and its monitoring ensure conformity of the manufactured products with the approved type described in the EC type-examination certificate and applicable standards.