

## CERTIFICATE

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

**Certificate No: ME-C-0252/B/2/24**

Notification No of the Certification Body: 0437

Date of issue: 12.10.2021

Test Report No: ME-R-0252/B/1/21

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  
Die Verheulweg 4 Waddinxveen Q4 2742JR  
Waddinxveen NL Rotterdam, Netherlands

Product Type:

DR-100S Ocean Voyager S-VDR

Item No:

MED/4.47, Simplified Voyage Data Recorder (S-VDR)

Regulations & Standards :

2014/90 EU, (EU) 2023/1667, SOLAS 74 Reg. V/20, EN  
60945 :2002 incl. IEC 60945 Corr.1 :2008, EN 61162-1  
:2016, EN 61162- 2 :1998, EN 61162-3 :2008 +A1 :2010  
+A2 :2014, EN IEC 61162-450 :2018, EN 61996-2 :2008, EN  
IEC 62288 :2022, EN IEC 62923-1:2018, EN IEC 62923-  
2:2018

Expiry Date of the Certificate:

11.10.2026

USCG Approval Category Nr:

165.151

#### 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 <165.151>."

"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



Product  
Certification  
Cert. No 27

For MIRTEC S.A.

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-0252/B/2/24**

**Description of Product:** MED/4.47 Simplified Voyage Data Recorder (S-VDR)

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

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

**Name and Address of the** NRC Marine Electronics and Services B.V  
**Authorised Representative:** Die Verheulweg 4 Waddinxveen Q4 2742JR  
Waddinxveen NL Rotterdam, Netherlands

**RELEVANT DOCUMENTATION**

**PRODUCT DESCRIPTION:**

NO	EQUIPMENT NAME	EQUIPMENT CODE	EQUIPMENT MODEL
1	UNDERWATER LOCATING DEVICE	ULD	DR-851-90
2	FIXED PROTECTIVE CAPSULE	FPC	OVM-6000
3	FLOAT FREE CAPSULE	FFC	OVM-1000
4	REMOTE CONTROL UNIT	RCU	DR-206
5	OUTDOOR MICROPHONE UNIT	OMU	DR-117
6	DIGITAL ANALOG SERIAL UNIT	DAS UNIT	DR-212
7	VIDEO INTERFACE UNIT	VIU	DR-211
8	AUDIO INTERFACE UNIT	AUDIU	DR-210

S-VDR DR-100S PART LIST			
NO	EQUIPMENT NAME	EQUIPMENT CODE	EQUIPMENT MODEL
1	DATA ACQUISITION UNIT	DAU	DR-102
2	REMOTE ALARM PANEL	RAP	DR-106
3	REMOTE CONTROL UNIT	RCU	DR-206
4	INDOOR MICROPHONE UNIT	IMU	DR-101
5	OUTDOOR MICROPHONE UNIT	OMU	DR-117
6	FIXED PROTECTIVE CAPSULE	FPC	OVM-6000
7	JUNCTION BOX	JB	DR-116

8	FLOAT FREE CAPSULE	FFC	OVM-1000
9	JUNCTION BOX	JB	DR-116V
10	DIGITAL-ANALOG-SERIAL UNIT	DAS UNIT	DR-212
11	VIDEO INTERFACE UNIT	VIU	DR-211
12	AUDIO INTERFACE UNIT	AUDIUI	DR-210
13	UNDERWATER LOCATING DEVICE	ULD	DR-851-90

## TECHNICAL DRAWINGS

S-VDR DR-100S DRAWING LIST			
DRAWING NO	EQUIPMENT NAME	EQUIPMENT CODE	EQUIPMENT MODEL
OCN.MD.1001	DATA ACQUISITION UNIT GENERAL VIEW	DAU	DR-102
OCN.MD.1002	DAU DIMENSIONS	DAU	DR-102
OCN.MD.1003	DAU EXPLODED PARTS	DAU	DR-102
OCN.MD.1004	DAU COMPONENT LIST	DAU	DR-102
OCN.MD.1005	POWER GROUP AND BATTERY EXPLODED VIEW	DAU	DR-102
OCN.MD.1006	DAU CABLE CANAL EXPLODED DETAILED VIEW	DAU	DR-102
OCN.MD.1007	MONTAGE PLATE EXPLODED VIEW	DAU	DR-102
OCN.MD.1008	DAU COMPONENT DIMENSIONS	DAU	DR-102
OCN.MD.1009	DAU SINGLE LINE DIAGRAM	DAU	DR-102
OCN.MD.1010	SYSTEM CONFIGURATION	S-VDR	DR-100S
OCN.MD.1011	DISPAN TECHNICAL DRAWING	DISPAN	DR-109
OCN.MD.1012	DISPAN PINOUTS	DISPAN	DR-109
OCN.MD.1013	INDOOR MICROPHONE GENERAL VIEW	IMU	DR-101
OCN.MD.1014	INDOOR MICROPHONE PINOUT	IMU	DR-101
OCN.MD.1015	DAU-BAM CONFIGURATION	DAU	DR-102
OCN.MD.1016	DAU EXPLODED VIEW 2	DAU	DR-102
OCN.MD.1017	FIXED PROTECTIVE CAPSULE	FPC	OVM-6000
OCN.MD.1018	FPC AND FFC CONNECTION DIAGRAM	FPC-FFC	OVM-6000 / OVM-1000
OCN.MD.1019	PROCESSOR DIMENSIONS	DAU	DR-102
OCN.MD.1020	PROCESSOR I/O PORTS	DAU	DR-102
OCN.MD.1021	CABLE CODES	S-VDR	DR-100S
OCN.MD.1022	DISPAN I/O DATASHEET	DISPAN	DR-109
OCN.MD.1023	DISPAN SCHEMATIC 1	DISPAN	DR-109
OCN.MD.1024	DISPAN SCHEMATIC 2	DISPAN	DR-109
OCN.MD.1025	FLOAT FREE CAPSULE	FFC	OVM-1000
OCN.MD.1026	DIGITAL ANALOG SERIAL UNIT CONNECTION DIAGRAM	DAS	DR-212

OCN.MD.1027	VIDEO INTERFACE UNIT CONNECTION DIAGRAM	VIU	DR-211
OCN.MD.1028	AUDIO INTERFACE UNIT CONNECTION DIAGRAM	AUDIU	DR-210
OCN.MD.1029	INDOOR & OUTDOOR MICROPHONE UNIT CONNECTION DIAGRAM	OMU	DR-117
OCN.MD.1030	REMOTE CONTROL UNIT CONNECTION DIAGRAM	RCU	DR-206
OCN.MD.1031	UNDERWATER LOCATING DEVICE DIAGRAM	ULD	DR-851-90

**CARRIAGE AND PERFORMANCE REQUIREMENTS FOR THE MANUFACTURER:**

2014/90 EU, (EU) 2023/1667, SOLAS 74 Reg. V/20, IMO Res. A.694(17), IMO Res. MSC.163(78), IMO Res. MSC.191(79), IMO Res. MSC.302(87).

**TEST REPORTS**

Issued by Ocean Voyager Test Laboratory  
According to CERT-med (EN05) - Testing Laboratory Evaluation Criteria

- Report No: OCN.MD.91-IEC 61162-1-2016
- Report No: OCN.MD.92-IEC 61162-2-1998
- Report No: OCN.MD.XX-IEC 61162-3
- Report No: OCN.MD.93-IEC 61162-450-2018
- Report No: OCN.MD.94-IEC 61996-2-2008
- Report No: OCN.MD.95-IEC 62288-2022
- Report No: OCN.MD.96-IEC 62388-2013 [ANNEX H]
- Report No: OCN.MD.97-IEC 62923-1-2018
- Report No: OCN.MD.98-IEC 62923-2-2018

Issued by GCNTR Test Laboratory

- Report No: GL-ENV-T-652-21 (EN 60945)
- Report No: EMC21-0649 (EN 60945)
- (Accreditation No: AB-1272-T by TURKAK)

REPORT NUMBER	EQUIPMENT NAME	EQUIPMENT CODE	EQUIPMENT MODEL
CSD-002-23	FIXED PROTECTIVE CAPSULE	FPC	OVM-6000
ÇEV-045			
EMI-021			
AQL-PFP-06/23			
CSD-003-23	FLOAT FREE CAPSULE	FFC	OVM-1000
ÇEV-044			
EMI-036/02-23			
CSD-006-23	UNDERWATER LOCATING DEVICE	ULD	DR-851-90
ÇEV-046			
EMI-037/02-23			
AQL-APP-08/23			
CSD-004-23	REMOTE CONTROL UNIT	RCU	DR-206
ÇEV-041/02-23			
EMI-035/02-23			
CSD-005-23	OUTDOOR MICROPHONE UNIT	OMU	DR-117
ÇEV-043			
EMI-033/02-23			
CSD-007-23	DIGITAL-ANALOG-SERIAL UNIT	DAS UNIT	DR-212
ÇEV-042/02-23			
EMI-034/02-23			
CSD-008-23	VIDEO INTERFACE UNIT	VIU	DR-211
ÇEV-047/02-23			
EMI-038			
CSD-009-23	AUDIO INTERFACE UNIT	AUDIU	DR-210
ÇEV-048/02-23			
EMI-039			

### **MARKING OF PRODUCT**

The type 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.