

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00007J2

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

This is to certify:

That the Speed and distance measuring equipment (SDME)

with type designation(s)
CLETA Electromagnetic Speed Log

Issued to

AVANTIX SASU
Aix en Provence, France

is found to comply with the requirements in the following Regulations/Standards:

Regulation (EU) 2021/1158,
item No. MED/4.7. SOLAS 74 as amended, Regulations V/18, V/19 & X/3, IMO Res. A.694(17), IMO Res. A.824(19), IMO Res. MSC.36(63), IMO Res. MSC.97(73), IMO Res. MSC.191(79), IMO Res. MSC.302(87)

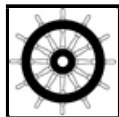
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2026-10-11**.

Issued at **Høvik** on **2021-10-12**

DNV local station:
France CMC

Approval Engineer:
Frederik Tore Elter



Notified Body
No.: **0575**

for **DNV AS**

Sverre Olav Bergli
Head of Notified Body

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 "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005, and amended by Decision No 1/2019 dated February 22nd, 2019.



The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

CLETA speed log single axis may be installed in 24v and 220v/115v configurations with the following components, including one of listed sensors:

Description	Designation	Article Number	Location
Model:			
Speed Log CLETA 24V (Article number: 96800)	Subset top case lock CLETA	96597	Protected
	Screen interface board	95501	
	SMARC IMX6 board NG	105116	
	Subset black case lock CLETA 24V	96801	
	Acquisition board lock 24V	96910	
Model:			
Speed Log CLETA 220/115 VAC (Article number: 96800)	Subset top case lock CLETA	96597	Protected
	Screen interface board	95501	
	SMARC IMX6 board NG	105116	
	Subset black case lock CLETA 220/115V	96598	
	Acquisition board lock 220V	96028	
Sensor:			
with Speed Log CLETA 24VDC or 220/115 VAC model	48mm SENSOR RVB WITH 16 METER CABLE or,	88888	Submerged
	48mm SENSOR RB WITH 16 METER CABLE or,	88900	
	48mm SENSOR RA or,	90902	
	65mm SENSOR WITH 20 METER CABLE or,	90904	
	LENS SENSOR	90900	

Application/Limitation

- CLETA speed log is to be installed in accordance with manufacturers documentation.
- If connected to an approved system, CLETA may present GPS information including position, SOG and COG.
- CLETA does not issue alerts, hence testing according to IEC 62923-1 and IEC 62923-2 is deemed as not being applicable.

Type Examination documentation

DNV No.	Document No.	Rev.	Title
20	DP073131CRT001	Rev. 03	Report: AVANTIX, IEC 61162-1, IEC 61023, IEC 62288 - CELETA - MED test results
19	DP073131MUL001	Rev. 04	Manual: BEN Marine, User and maintenance manual CLETA electromagnetic log
18	RCL-ADEESS21F487AVA-01	0	Report: Adetests, IEC 60945 Climatic test report, cleta 220v/24v
17	R-ADE-BMN-18-300240-4/A	00	Report: Adetests, Salt spray test report combined repeater
16	MI-008-IST	1.4	Test Procedure: Avantix, Procedure for testing for 48mm and 68mm sensors
15	DP073131CRT002	00	Report: Avantix, CLETA 48mm and 68mm sensor Water Immersion and Dry Heat report
13	R120-18-102 634-01-3-A0	0	Report: Emitech, IEC 60945 c. 12.1 test report
11	RC410-21A356-1A	0	Report: Emitech, EMC test report IEC 60945 220v
10	R-LAB-214-1	1	Report: Piseo, Measurement of LCD Display 62288
8	DP068323NTE024	0	Waiver: Avantix, Sensors Corrosion (salt mist) Justification
3	R-ADE-BMN-20-300207-2/A	00	Report: Adetests, IEC 60945 Vibration and Shock test report
2	RTPIE-429-20-600051-1-A	0	Report: Adetests, IEC 60945 EMC test report 24v
1	R-ADE-BMN-20-300207-1/A	00	Report: Adetests, IEC 60945 Climatic test report

Tests carried out

- Environmental testing: IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),
- Presentation testing: IEC 62288 (2014)
- Interface testing: IEC 61162-1 (2016)
- Performance testing: IEC 61023 (2007)

Marking of product

The name and contact address of the manufacturer and type designation of the product is to be affixed to the equipment in a clearly visible location. In addition, the equipment shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.