

EC TYPE-EXAMINATION (MODULE B) CERTIFICATE

Marine Equipment Directive (MED) 2014/90/EU

PHOENIX TESTLAB
Notified Body Number **0700**

Recognised by



0800S11/4822/007

BUNDESAMT FÜR
SEESCHIFFFAHRT
UND
HYDROGRAPHIE

This is to certify that:

PHOENIX TESTLAB did undertake the relevant type approval procedures for the type of equipment identified below which was found to be in compliance with the requirements of Marine Equipment Directive (MED) 2014/90/EU, subject to any conditions in the schedule attached hereto.

Certificate No.	PTL-MED-B-21-110511
Manufacturer	Alltek Marine Electronics Corp.
Address	14F-2, No. 237, Sec. 1, Datong Rd., Xizhi District New Taipei City 22161, Taiwan, R.O.C.
Authorised Representative	Netwave Systems BV
Address	Blauw-roodlaan 100 2718 SJ Zoetermeer The Netherlands
Directive Reference (No & Item designation)	Directive 2014/90/EU, Regulation (EU) 2020/1170 MED/4.55 Search and rescue locating devices (SRLD): AIS SART equipment
Product Description	AIS SART equipment
Product Name / Trade Name	Z650 (McMurdo SMARTFIND S5A AIS SART) Z650 (Kannad Marine SAFELINK AIS SART2) Z650 (Cobham SAILOR 5052 AIS SART)
Specified Standards	
IMO Res. MSC.246(83)	IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008)
ITU-R M.1371-5 (2014)	IEC 61097-14 Ed. 1.0 (2010)

Date of issue: **2021-06-14** Expiry date: **2026-06-13**

This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with.

The attached Schedule of Approval forms part of this certificate. This certificate consists of 3 pages.



Signed by Klaus Knörig
Notified Body

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Schedule of Approval

Technical description

Frequency Range	161.975 MHz (AIS 1) and 162.025 MHz (AIS 2)
Transmit Power	1.0 W / 30 dBm (nominal EIRP)
Hardware Version	M-PCB-SARTV03
Software Version	1.1

System Components

Main Unit	Z650
GPS antenna	internal
VHF antenna	internal

Approval documentation

User Manuals	Kannad Safelink AIS SART2 USER MANUAL- 1001956 A00 EN-2 McMurdo Smartfind AIS SART S5A AIS SART USER MANUAL- 1001955 A00 EN-2 SAILOR 5052 AIS SART USER MANUAL- 1001957 A00 EN-2
Schematics	Schematic circuit drawing, M-PCB-SARTV03, 7 pages, 2011-07-12, 2011-11-16
PCB Layout and Parts Placement	PCB Layout, 4 pages
Parts List	Parts List 20180806, 3 pages
Drawing	Mechanical drawing, 1 page
Photos	External and Internal Photos, 6 pages
Declaration	Declaration of Equivalence, 15 pages, 2018-08-21

Applied Standards and Test Reports

Specification	Laboratory	Test Report Number / Version
IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008) Environmental tests	PHOENIX TESTLAB	U112488E1, 3rd Version, 2012-07-30
IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008) Environmental tests	iST	HS1108300140A, 2011-09-07
IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008) Environmental tests	SGS	HC70207A/2011, 2011-09-22



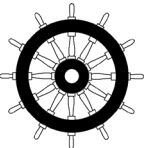
Specification	Laboratory	Test Report Number / Version
IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008) Environmental tests	SGS	HC60189A/2011, 2018-07-17
IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008) Environmental tests	iST	HS1106290042A-2, Version B, 2011-07-27
IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008) EMC tests	QuieTek	118010R-RFCEP76V01, 2011-08-19
IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008) Compass safe distance	BSH	Certificate No. 693, 2012-01-30
IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008) Electromagnetic RF radiation	QuieTek	129031R-ITCEP26V01, 2012-09-13
IEC 61108-1 Ed. 2.0 (2003) GPS test report	BSH	BSH/4615/4361928/11-2, 2011-06-30
IEC 61108-1 Ed. 2.0 (2003) GPS test report	BSH	BSH/46162/4321542/11-2, 2011-06-23
IEC 61108-1 Ed. 2.0 (2003) GPS test report	BSH	BSH/46121/4142396/12, 2012-11-16
IEC 61097-14 Ed. 1.0 (2010) 6.1(h) Floating test	AMEC	AS500-TR-1202-Q01-01, 2012-02-08
IEC 61097-14 Ed. 1.0 (2010) Clause 6, 7, 8	BSH	BSH/4615/4361928/12-1, 2012-04-11
IEC 61097-14 Ed. 1.0 (2010) Clause 7	PHOENIX TESTLAB	F112488E1, 2nd Version 2012-01-16
IEC 61097-14 Ed. 1.0 (2010) Clause 6.2 Battery capacity	PHOENIX TESTLAB	U181129E1, 2018-08-08
IEC 61097-14 Ed. 1.0 (2010) Clause 7.4 Radiated power	PHOENIX TESTLAB	F181129E1, 2018-08-08

Limitations / Restrictions

- None -

Notes

1. This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with PHOENIX TESTLAB.
2. Should the specified regulations or standards be amended during the period of validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on the market and on board vessels to which the amended regulations or standards apply.

3.  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-control phase module (D, E, or F) of ANNEX II of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.

