

# EC TYPE-EXAMINATION (MODULE B) CERTIFICATE

## Marine Equipment Directive (MED) 96/98/EC

**PHOENIX TESTLAB**  
Notified Body Number **0700**

Recognized by the German Federal Maritime and Hydrographic Agency (BSH)

This is to certify that:

PHOENIX TESTLAB 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 as last amended by COMMISSION DIRECTIVE (EU) 2015/559, subject to any conditions in the schedule attached hereto.

Certificate No.	PTL-MED-B-16-110730
Applicant	FT-TEC Electronics GmbH
Address	Werner von Siemens-Strasse 5 7343 Neutal, AUSTRIA
Manufacturer	FT-TEC Electronics GmbH
Address	Werner von Siemens-Strasse 5 7343 Neutal, AUSTRIA
Annex A.1 Item (No & Item designation)	A.1/4.55 Search and rescue locating devices (SRLD): AIS SART equipment
Product Description	AIS SART equipment
Brand Name / Model Name	SEAANGEL, SA15 AIS FLARE

### Specified Standards

SOLAS 74 as amended:  
Regulation III/4, III/6, III/26, IV/7, IV/14  
IMO Res. MSC.246(83)  
IMO Res. MSC.256(84)  
ITU-R M. 1371-5 (2014)<sup>1</sup>

IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008)<sup>2</sup>  
IEC 61097-14 Ed. 1.0 (2010)

<sup>1</sup> as relevant to AIS SART    <sup>2</sup> limited to the requirements of IEC 61097-14

Date of issue                      **2016-05-13**

Expiry date:                      **2021-05-12**

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service. The conditions for the validity of this certificate are listed in the Annex.

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



Signed by Dieter Griep  
Notified Body

Phone +49(0)5235-9500-24  
Fax +49(0)5235-9500-28  
notifiedbody@phoenix-testlab.de

PHOENIX TESTLAB GmbH  
Königswinkel 10  
D-32825 Blomberg, Germany  
www.phoenix-testlab.de

## 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)
Software Version	1.3.x

### System Components

Main Unit	SEAANGEL SA15 AIS FLARE
GPS antenna	internal
VHF antenna	internal

### Approval documentation

User Manual	SA15 AIS FLARE Maritime distress beacon, Revision 1.9, 2016-04-16
-------------	--

### Applied Standards and Test Reports

Specification	Laboratory	Test Report Number / Version
IEC 60945 EMC tests	Phoenix Testlab	F153662E2, 2016-02-17
IEC 60945 Environmental tests	Phoenix Testlab	U153662E1, 2016-01-22
IEC 60945 Environmental tests	Phoenix Testlab	U153662E3, 2016-02-23
IEC 61097-14 Operational tests	Phoenix Testlab	F160768E1, 2016-04-19
IEC 61097-14 Physical radio tests	Phoenix Testlab	F153662E1, 2016-02-16
IEC 61097-14 Link layer tests	BSH	BSH/4543/001/4363009/16-1, 2016-04-15
IEC 61108-1 GPS test report	BSH	BSH/4543/001/4142824/14, 2014-09-30
IEC 60945 Compass safe distance	BSH	Certificate No. 938a, 2016-04-12



### Places of production


FT-TEC Electronics GmbH, Werner von Siemens-Strasse 5, 7343 Neutal, AUSTRIA

### Limitations / Restrictions

- None -

### Notes

1. This certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with PHOENIX TESTLAB.
2. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/them being placed 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 B of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.



## EC QUALITY SYSTEM (MODULE D) CERTIFICATE

### Marine Equipment Directive (MED) 96/98/EC

**PHOENIX TESTLAB**  
Notified Body Number **0700**

**Recognized by the German Federal Maritime and Hydrographic Agency (BSH)**

This is to certify that:

PHOENIX TESTLAB did undertake the relevant quality assessment procedures for the equipment of the manufacturer identified below which was found to be in compliance with the Navigation requirements of Marine Equipment Directive (MED) 96/98/EC, as amended, last amended by COMMISSION DIRECTIVE (EU) 2015/559 and with the type described in the EC Type Examination Certificates (Module B) listed in the Attachment to this Certificate, subject to any conditions in the schedule attached hereto.

The manufacturer maintains and applies a quality system in accordance with the requirements of the Maritime Equipment Directive Annex B, Module D.


Certificate No.	PTL-MED-D-16-110729
Manufacturer	FT-TEC Electronics GmbH
Address	Werner von Siemens-Strasse 5 7343 Neutal, AUSTRIA
Scope, Annex A.1 Item (No & Item designation)	A.1/4.55 Search and rescue locating devices (SRLD): AIS SART equipment

Date of issue: **2016-05-17**      Expiry date: **2021-05-16**

This certificate remains valid unless cancelled expired or revoked.

This certificate consists of 3 pages.



  
Signed by Dieter Griep  
Notified Body

### Places of production

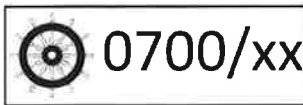
FT-TEC Electronics GmbH, Werner von Siemens-Strasse 5, 7343 Neutal, AUSTRIA

### Limitations / Restrictions

- None -

### Notes

1. This certificate authorises the manufacturer or his authorised representative established within the Community in conjunction with the EC TYPE-EXAMINATION (MODULE B) CERTIFICATE of the equipment listed in the scope to affix the "Mark of Conformity" (wheelmark).
2. This certificate loses its validity if the manufacturer makes any changes or modifications to the approved quality system, which have not been notified to, and agreed with the Notified Body named on this certificate and/or after lapse of time, withdrawal or revocation of the EC-Type Examination (Module B) Certificate.
3. Example for the "Mark of Conformity"



0700 Number of the Notified Body responsible for quality surveillance  
xx Last two digits of the year in which the mark is affixed



### Annex

Item	Module B Certificate data				
	Registration number	Date of issue	Date of expiry	Notified Body	
<b>A.1/4.55</b>	<b>Search and rescue locating devices (SRLD) AIS SART equipment</b>				
	SEAANGEL SA14-SART	4581/001/4552646/14	2014-12-15	2019-12-14	BSH-Cert 0735
	SEAANGEL SA15 AIS FLARE	PTL-MED-B-16-110730	2016-05-13	2021-05-12	Phoenix Testlab 0700



**TCB**

**GRANT OF EQUIPMENT  
AUTHORIZATION**

**TCB**

**Certification  
Issued Under the Authority of the  
Federal Communications Commission  
By:**

**PHOENIX TESTLAB GmbH  
Koenigswinkel 10  
32825 Blomberg,  
Germany**

**Date of Grant: 06/14/2016  
Application Dated: 06/14/2016**

**FT-Tec Electronics GmbH  
Werner von Siemens Strasse 5  
Neutal, 7343  
Austria**

**Attention: Friedrich Trobolowitsch**

**NOT TRANSFERABLE**

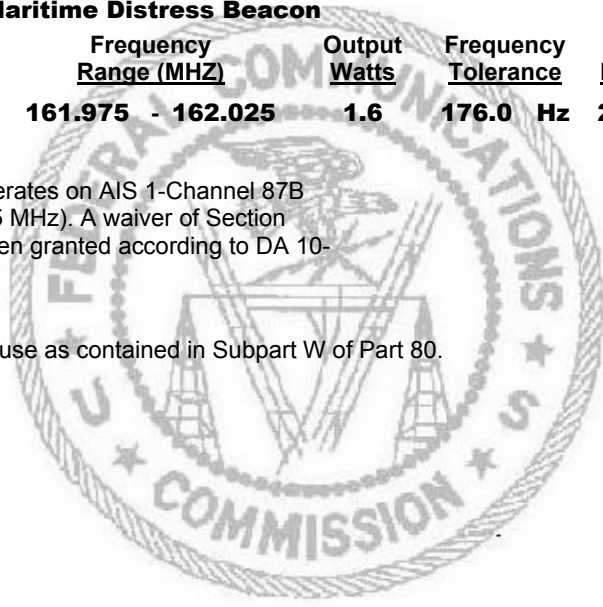
EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE,  
and is VALID ONLY for the equipment identified hereon for use under the  
Commission's Rules and Regulations listed below.

**FCC IDENTIFIER:** 2AFFD-AIS-FLARE  
**Name of Grantee:** FT-Tec Electronics GmbH  
**Equipment Class:** Automatic Identification Systems  
**Notes:** Maritime Distress Beacon

<u>Grant Notes</u>	<u>FCC Rule Parts</u>	<u>Frequency Range (MHZ)</u>	<u>Output Watts</u>	<u>Frequency Tolerance</u>	<u>Emission Designator</u>
GM	80	161.975 - 162.025	1.6	176.0 Hz	25K0GXW

Output power is peak conducted. The device operates on AIS 1-Channel 87B (161.975 MHz) and AIS 2-Channel 88B (162.025 MHz). A waiver of Section 80.1101(c)(6) of the Commission's Rules has been granted according to DA 10-1275, WT Docket No. 10-34.

GM: This unit meets requirements for GMDSS use as contained in Subpart W of Part 80.



U.S. Department of  
Homeland Security

United States  
Coast Guard



Commandant  
United States Coast Guard

Martin Luther King Jr. Ave. SE, Stop 7509  
Washington, DC 20593-7509  
Staff Symbol: CG-ENG-3  
Phone: (202) 372-1375  
Email: TypeApproval@uscg.mil

2016-729  
16714  
June 16, 2016

FT-TEC  
Attn: Andreas Krejci  
Werner von Siemens Strasse 5  
A-7343 Neutal  
Austria

Dear Andreas Krejci,

Our office has evaluated the FT-TEC Automatic Identification System (AIS) Search and Rescue Transponder (SART) SEAANGEL, SA15 AIS FLARE. Based on the information you submitted, the system meets the technical requirements outlined in the Safety of Life at Sea Convention (SOLAS) regulation III/6.2.2, regulation IV/7.1.3, and the performance standards in the International Maritime Organization's Resolution MSC.246(83).

This equipment is not subject to U.S. Coast Guard type-approval per Title 46 U.S. Code of Federal Regulations (CFR) subpart 159 nor should it be marketed as having received such type-approval. However, this letter may be used during the review and approval process performed by the U.S. Federal Communications Commission, as applicable.

If you have any questions please feel free to contact this office at the email address or phone number above.

Sincerely,

A handwritten signature in blue ink that reads "Todd M. Howard".

T. M. HOWARD  
Commander, U.S. Coast Guard  
Chief, Systems Engineering Division  
Office of Design and Engineering Standards  
By direction

Copy: Federal Communications Commission