Certificate no.:
TAA00003DD

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Automatic Telephone System

with type designation(s)
Innovaphone Automatic Telephone System

issued to
innovaphone AG
Sindelfingen, **Germany**

is found to comply with
DNV rules for classification – Ships, offshore units, and high speed and light craft
DNV statutory interpretations DNV-SI-0364 – SOLAS interpretations, Edition July 2021
General requirements for electromagnetic compatibility for all electrical and electronic ship's equipment (IMO Res. A.813(19))
IMO Res. A.694(17) General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids

Application:

See page 2

Temperature	**A**
Humidity	**B**
Vibration	**A**
EMC	**B**
Enclosure	**See product description on page 2**

Issued at **Høvik** on **2024-06-03**
This Certificate is valid until **2029-06-02**.
DNV local unit: **Augsburg**

for **DNV**

Approval Engineer: **Steinar Kristensen**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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

The Innovaphone Automatic Telephone System provides telephone services VoIP and consist of the following components.

IP Phone system:

Component	Type	Description	Enclosure/ Location	FW/ SW version
Central Unit	IP811- maritime	VoIP PBX and gateway including: • 5 x ISDN BRI interfaces, RJ-45 connector • 10 voice / conference channels • 2 x 1000-BASE-T, RJ-45 connector with PoE	A Protected	14r1
Analog Adapter	IP29-8- maritime	• 8x FXS interfaces, RJ-11 connector • 1 x 10/100-BASE-T, RJ-45 connector with PoE		14r1
IP Telephone Unit	IP111- maritime	IP phones, with or without handset • 1 x Ethernet: 10/100-BASE-TX, RJ-45 connector with PoE • 1 x Ethernet: 10/100-BASE-TX, RJ-45 for PC connection		14r1
Analog Telephone Units	SC220	Water tight and salt mist resistant industrial telephone station with built in call relay	C Exposed	01xx
	SC411	Flush mount telephone station with display, backlight and hands-free	A Protected	01xx
	SC421	Water tight telephone station with display, backlight and hands-free	C Exposed	01xx
Network switch	Lynx-3510-F2G-P8G-LV *)	PoE Switch, 2 x 1 Gbit/s, Ethernet FX, SFP 8 x 10/100/1000 Mbit/s, Ethernet TX, RJ-45	A Protected	5.15.1
Network transceiver module	GTX100	SFP Copper- Transceiver module for use with Network switch, 1000Mbit/s, RJ-45	A Protected	N.A.
Power Supply	CP10.481	48 v Power supply	A Protected	N.A.
Accessories	Handset/ cradle	Watertight handset with cradle for use with SC220 and SC421	C Exposed	N.A.
	Handset/ cradle	Flush mount handset for SC411	A Protected	N.A.
	Headset	Noise cancelling headset with 10m cable for use with SC220 and SC421	A Protected	N.A.

*) Alternative network switches may be applied if documented for compliance to DNV-CG-0339 and set up according to Innovaphone instructions.

Application/Limitation

- Is to be installed and configured in accordance to the Innovaphone Maritime Engineering Guide.
- Shall operate on a dedicated IP network/ LAN/ VLAN. Interconnection to other networks is subject to separate case-by-case approval.

Type Approval documentation

DNV No	Document ID	Rev.	Description
10	TAA0000364	2	Certificate: DNV, Type Approval certificate for Lynx 3510-F2G-P8G-LV ethermet switch
9	TAA0000252	5	Certificate: DNV, Type Approval certificate for Innovaphone IP811-maritime, IP111- maritime and IP29-8- maritime
8	TAA0000054	2	Certificate: DNV, Type Approval certificate for SC220, SC411 and SC421 analog phones
7	TAA00002YX	2021-03-23	Certificate: DNV, Type Approval certificate for CP.10481 power supply
6	TAA000006B	3	Certificate: DNV, Type Approval certificate for GTX100 ethernet transceivers
5		1.00	Manual: Innovaphone, innovaphone Maritime Engineering Guide
4		2024-02-13	Report: Innovaphone, Test report for DNV Automatic Telephone system approval program 845.25

Tests carried out

- Environmental testing: DNV-CG-0339 (2021)
- Performance testing: Functional tests according to DNV Type Approval program 848.25

Marking of product

The Manufacturer and Type Designation to be applied 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.

Periodical assessment

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.
The scope of the periodical/renewal assessment is to verify that the production quality conditions stipulated for the type approval are complied with and that no alterations are made to the product design or its components and/or materials without appraisal by the Society.

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in https://approvalfinder.dnv.com