



Type Approval Certificate

[Alarm, Monitoring and Control System]

Initial Approval 13 October 2017

Manufacturer Shanghai Noris-Sibo Automation Co., Ltd.
1st Floor, No.8 Bldg. South, No.2716 Ping Liang Rd., Yangpu District, Shanghai,
200090, P.R.China

Product Description Alarm and Monitoring System
Type : N3500

" See Appendix 1 "

Approval Condition " See Appendix 1 "

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows.

Pt. 6, Ch. 2, Art. 301 of the Rules for Classification of Steel Ships.

This Certificate is valid until 12 October 2027

Issued at Shanghai, China on 4 July 2022



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No(ME22020731393) and certificate No.(SHI22985-AC001).



KOREAN REGISTER

*General Manager of
Technical Support Team
CHINA KR Co., Ltd.*

- Note :**
1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
 2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
 3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
 4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

Product Description and/or Approval Condition

Date of Issue : 4 July 2022

A. Product Description

1. Product Specification

1) This system consists of the following units.

Type	Description
AMS SAU	800x800
Gateway	GATEWAY
Binary measuring module	STM7-IN32
I/O module	STM7-INOUT
Integrated I/O module	STM7-AINOUT
Current Voltage measuring module	STM7-I/V1
Thermal resistance measuring module	STM7-PT100
Thermocouple measuring module	STM7-MV1
Binary measuring module	STM7-SAFT
Analog output module	D/A
Extend Alarm panel	N3510/N3511
Color LCD display	N3520/N3521
Industrial computer	TANK-600
UPS	V-1000
TP-Link	TL-SF1008+
Display	PHILIPS-17"
Printer	LQ-300K+II
Monitor unit	N3500-MU220-17 N3500-MU220-19 N3500-MU220-21 N3500-MU220-23
Switch	N3500-HUB-SF1016D
Keyboard	N3500-KB-1

- 2) Power Supply : 18 ~ 36 VDC
220 ~ 240 VAC, 50/60Hz
- 3) Approved Software Version : N3500 Rev. 02

2. Approval Drawings and Documents

1) Manual

- Software Quality Control Plan : NSB-TD-1001-EN
- FMEA : NSB-TD-1002-EN
- User Manual : NSB-TD-2001-EN
- Extension Alarm Panel User Manual : NSB-TD-2002-EN
NSB-TD-2003-EN
- FF7 Mimic Manual : NSB-TD-2004-EN
- Troubleshooting & Service Manual : NSB-TD-3001-EN

2) Drawings : Pack No. NS-3500 YJ, Rev.02, Dated on Feb. 07, 2017

3. Test Reports

- 1) Function and Environmental Test : A15-053-ZC Dated on Jan 20, 2016, issued by SITIIAS
- 2) Function and Environmental Test : A17-001-WT Dated on Jan 23, 2017, issued by SITIIAS
- 3) EMC Test : A17-007-WT Dated on May 10, 2017, issued by SITIIAS
- 4) EMC Test : A21-014-WT Dated on Oct 19, 2021, issued by SITIIAS

B. Approval Conditions :

1. Application & Limitation

1) This approval is granted on the basis of the test reports, technical specifications, and approved drawings.

2. Individual Product Cert. and Drawing Approval Requirement

- 1) Individual Product Certification is required.
- 2) Drawing approval for each vessel is required.

< To be continued >

Product Description and/or Approval Condition

Date of Issue : 4 July 2022

3. Marking

- 1) The product or packing is to be marked with the manufacturer name and type designation on a suitable position.

4. Others

- 1) The manufacturer should inform this Society of all kinds of revisions of the approved softwares. If the changes are recognized to affect the functionality of the approved system, Type Test to confirm the reliability of the revised software may be performed in the presence of our surveyor.

< The End >

