



中国船级社
CHINA CLASSIFICATION SOCIETY

证书编号/Certificate No.
LT23PTB00006

型式认可证书
CERTIFICATE OF TYPE APPROVAL

兹证明本证书所述制造厂具备按照下列标准的要求生产本证书所列产品的能力和条件。

This is to certify that the manufacturer stated in the certificate meets the requirements of the standards listed below and is available with the ability and conditions to produce the products described in the certificate.

制造厂/Manufacturer

Praxis Automation Technology B.V.

地址/Address

Zijldijk 24A, Leiderdorp, the Netherlands

产品名称/Product

监测、报警与控制装置

Monitoring, Alarm and Control Device

综合测量、监控报警及控制系统

Integrated Gauging, Monitoring & Alarm and Controlling System

附加标志/Notations

无/Nil.

认可标准/Approval Standard

- 中国船级社《钢质海船入级规范》（2023）及其变更通告第4篇第1章
Chapter 1, Part Four of China Classification Society Rules for Classification of Sea-going Steel Ships 2023 and its Change Notices
- 中国船级社《钢质海船入级规范》（2023）及其变更通告第7篇第2章
Chapter 2, Part Seven of China Classification Society Rules for Classification of Sea-going Steel Ships 2023 and its Change Notices
- 中国船级社《钢质海船入级规范》（2023）及其变更通告第8篇第11章
Chapter 11, Part Eight of China Classification Society Rules for Classification of Sea-going Steel Ships 2023 and its Change Notices

用于/Intended for

船舶/Ships

证书有效期至/This Certificate is valid until 2027年09月28日/Sep. 28, 2027

发证机构/Issued by 中国船级社鹿特丹办事处
CCS Rotterdam Office

签发日期/Date 2023年09月28日
Sep. 28, 2023

本证书根据中国船级社规范和相关规定签发。所有证书页为一个整体，必须同时使用。纸质证书每页均须由本社盖章方为有效，电子证书含数字签名方为有效，本证书复印件无效。任何单位和个人均不应摘录或节选本证书的部分内容。有关方对所持证书的真实性有疑问时，可以向本社检验机构咨询。This Certificate is issued pursuant to the Rules of the Society and related regulation. All pages of the certificate are taken as a whole and are used simultaneously. No paper certificate page is valid without bearing the stamp of the Society, no electronic certificates is valid without the digital signature, and no copied form of the certificate is regarded as valid. Any part of the certificate is not to be extracted or abridged by any unit or individual in any form. Related parties who are doubted about the authenticity of the certificate may inquire of the Society or its offices.



Form No: T01.

联系方式/Contact Us, 见本社官方网站/See official web site of the Society (<http://www.ccs.org.cn>)

UTN:P023-19335357

产品明细/Product Description

综合测量、监控报警及控制系统/Integrated Gauging, Monitoring & Alarm and Controlling System (M0001)

名称/Name	属性(值)/Value	单位/Unit
型号/Type	MEGA-GUARD	
系统组成/System Component	Refer to attached particulars of product	

批准的图纸/Approved Drawings

图纸批准号/ Drawings Approval No. : NP14A03397

产品认可试验报告/ Approval Test Report

试验报告编号/ Test Report No. : Mega-Guard-Type Approval 2008_3

试验报告日期/ Test Report Date : 2006-10-16

试验单位/ Laboratory: PRAXIS

试验单位地址/ Test Address: Leiden, the Netherlands

试验报告编号/ Test Report No. : Type Approval 2018 - rev1.0

试验报告日期/ Test Report Date : 2019-09-09

试验单位/ Laboratory: PRAXIS

试验单位地址/ Test Address: Leiden, the Netherlands

试验报告编号/ Test Report No. : Type Approval 2015 - Set 1 rev1.2

试验报告日期/ Test Report Date : 2015-12-04

试验单位/ Laboratory: PRAXIS

试验单位地址/ Test Address: Leiden, the Netherlands

试验报告编号/ Test Report No. : Type Approval 2015 - Set 2 rev1.2

试验报告日期/ Test Report Date : 2016-04-28

试验单位/ Laboratory: PRAXIS

试验单位地址/ Test Address: Leiden, the Netherlands

试验报告编号/ Test Report No. : 93130-krq/emc 99-4334b

试验报告日期/ Test Report Date : 1999-09-02

试验单位/ Laboratory: KEMA

试验单位地址/ Test Address: Arnhem, the Netherlands

试验报告编号/ Test Report No. : Mega-Guard-Type Approval augustus 2006-1

试验报告日期/ Test Report Date : 2006-05-29

试验单位/ Laboratory: PRAXIS

试验单位地址/ Test Address: Leiden, the Netherlands

试验报告编号/ Test Report No. : Mega-Guard-Type Approval 2008_2

试验报告日期/ Test Report Date : 2005-08-02

试验单位/ Laboratory: PRAXIS

试验单位地址/ Test Address: Leiden, the Netherlands

试验报告编号/ Test Report No. : Mega-Guard-Type Approval November 2008

试验报告日期/ Test Report Date : 2009-06-12

试验单位/ Laboratory: PRAXIS

试验单位地址/ Test Address: Leiden, the Netherlands

试验报告编号/ Test Report No. : Mega-Guard-Type Approval February 2009

试验报告日期/ Test Report Date : 2009-04-08

试验单位/ Laboratory: PRAXIS

试验单位地址/ Test Address: Leiden, the Netherlands

试验报告编号/ Test Report No. : Mega-Guard-type Approval December 2009

试验报告日期/ Test Report Date : 2010-09-09

试验单位/ Laboratory: PRAXIS

试验单位地址/ Test Address: Leiden, the Netherlands

试验报告编号/ Test Report No. : Mega-Guard E type approval January 2011

试验报告日期/ Test Report Date : 2011-06-21

试验单位/ Laboratory: PRAXIS
试验单位地址/ Test Address: Leiden, the Netherlands

试验报告编号/ Test Report No. : Mega-Guard E Type approval November 2013
试验报告日期/ Test Report Date : 2013-08-19
试验单位/ Laboratory: PRAXIS
试验单位地址/ Test Address: Leiden, the Netherlands

试验报告编号/ Test Report No. : Mega-Guard-Type approval 2011-1
试验报告日期/ Test Report Date : 2012-02-15
试验单位/ Laboratory: PRAXIS
试验单位地址/ Test Address: Leiden, the Netherlands

试验报告编号/ Test Report No. : Type Approval test document 2011 januari rev 1.2
试验报告日期/ Test Report Date : 2011-06-07
试验单位/ Laboratory: PRAXIS
试验单位地址/ Test Address: Leiden, the Netherlands

试验报告编号/ Test Report No. : Type Approval 2013 -1 - rev1.0
试验报告日期/ Test Report Date : 2013-08-19
试验单位/ Laboratory: PRAXIS
试验单位地址/ Test Address: Leiden, the Netherlands

试验报告编号/ Test Report No. : Mega-Guard-Type Approval 2008_4
试验报告日期/ Test Report Date : 2005-08-02
试验单位/ Laboratory: PRAXIS
试验单位地址/ Test Address: Leiden, the Netherlands

认可后的产品检验方式/ Method of Product Inspection after Approval

按规范认可后应进行产品检验的产品/The product should be inspected in term of the rules:
认可后的产品检验应由本社验船师根据本社规范规定按批准的产品检验计划进行检验, 经检验合格后由本社颁发船用产品证书。

After approval, product inspection should be carried out by the Surveyor of the Society in accordance with the approved product inspection scheme, and the Marine Product Certificate will be issued by the Society upon satisfactory inspection.

认可保持条件/ Maintenance Requirements of Approval

1. 型式认可后, 如果产品及其重要零部件的设计、所用材料或制造方法有所改变, 且影响到产品的主要特性、特征; 或产品的性能指标有所更改, 且超过认可的范围, 则有关图纸和文件应经检验机构审批。并在检验机构认为必要时, 经本社检验人员见证有关试验和进行检查, 其结果应能证实仍符合认可条件。

After type approval, if there are changes to the design, materials used or manufacturing method of the product and important components and such changes affect major characteristics and properties of the product, or property indexes of the product are changed and exceed the scope of approval, related drawings and documents are to be examined and approved by the concerned survey office. Where deemed necessary by the survey office, the surveyor to the Society will go to witness relevant tests and conduct inspection and the results should be able to demonstrate compliance with the approval conditions.

2. 工厂的质量管理体系应保持有效运行, 并且与认可时一致。如果质量管理体系发生改变, 应经原体系认证机构审核并报本社批准。

The quality management system of the factory shall be ensure effective operation, and shall be the same as the situation of approval. If there are any changes to the quality management system, auditing of the original certification organization for quality management system and the society's approval shall be obtained.

3. 认可证书有效期内, 如果出现可能导致本社取消认可的情况, 工厂应及时采取有效的纠正措施。

Within the validity of the approval certificate, if cases occur that may cause the Society to withdraw the approval, the manufacturer should take corrective actions in a prompt and effective manner.

4. 在认可证书有效期内, 本社检验人员可在未经事先通知的情况下对工厂的产品制造过程进行审核, 以验证产品的生产是否符合业经本社批准的图纸和文件。工厂应予以配合。

Within the validity of the approval certificate, the surveyor to the Society may pay unannounced audit to the manufacturing process of the product in order to confirm whether it is in compliance with the drawings and documents approved by the Society. The factory should provide an active cooperation and necessary for the surveyor.

5. 如果属于获得型式认可B 模式证书, 且无需颁发船用产品证书/等效证明文件的情况, 证书获得者应接受本社每年一次的定期审核, 定期审核日为认可证书期满之日对应的每一周年日, 检查工作应在周年日的前后三个月内进

行。

If belong to the situation of the product has type approval mode B certificate, and marine product certificate/equivalent document is not necessary, those who have obtained the certificate should be subject to periodical audit every year. The date of periodical audit shall be each anniversary date which corresponds to the date of expiry of the relevant certificate and the periodical audit shall be done within a time span of three months before and after the annual surveillance date.

备注/Remarks

本证书由原型式认可证书 (No. LT19PTB00003) 换新并替代原证书。

This certificate is renewed from and supersedes the previous Type Approval Certificate No. LT19PTB00003.

本社已审核了产品厂无石棉声明，但本社的审核不免除产品厂按照合同关系向订货方保证产品无石棉的责任。

The declaration of asbestos-free submitted by manufacturer has been reviewed by the Society.

However, liability of the manufacturer to guarantee the products are asbestos-free to purchaser under contract will not be exempted.

中国船级社鹿特丹办事处

CCS Rotterdam Office

注：本证书含有附页，共3页

Note: The certificate is attached with additional 3 page(s)

Particulars of System

1. The System consisting of:
 - 1) OWS - Operator Work Station (also named 'All in one' Work Station) comprises the following components:
 - Model 6001 Marine Personal Computer; including redundant network interface (type 98.6.001.7xx and type 98.6.001.8xx)
 - TFT colour Graphic screen (type 98.6.02x.6xx)
 - Operator Keyboard (type 93.6.02x.x0x)
 - Engineering Keyboard (type 76.0.20x)
 - Keyboard/Tracker ball (type 93.6.02x.x0x)
 - Ethernet HUB/Router (type 76.0.81x)
 - Switch 24 port (type 76.0.84x)
 - Switch 8 port (type 76.0.85x)
 - 6010 Fieldbus Driver Board (type 98.6.010.7x0)
 - Panel PC 10" (type 98.6.022.84x.x)
 - Panel PC 17" (type 98.6.022.87x.x)
 - Panel PC 19" (type 98.6.022.82x.x)
 - Panel PC 22" (type 98.6.022.88x.x)
 - Panel PC 26" (type 98.6.022.89x.x)
 - Marine PC (type 98.6.001.83x)
 - Trackerball Controller (type 98.6.022.632)
 - Joystick Controller (type 98.6.022.631)
 - Ethernet switches (type 76.0.81x, 76.0.84x, 76.0.85x)
 - 8-Ports Ethernet Switch (98.6.040.802)
 - 18-Ports Ethernet Switch (98.6.040.803)
 - DIN module media converter RJ45/Fiber ST (98.6.040.806)for the following typical processes
 - Alarm/Control and Monitoring
 - Main Engine Control
 - DP Control Station
 - Electrical Power Management
 - Pump and Valve Control
 - Duty Alarm System
 - Patrol Alarm System
 - PID Control
 - Graphic presentation of ship's data
 - 2) EAS - Extension Alarm System for the remote alarm indication in the cabin(s) and public space(s) consisting of:
 - Local Operator Panel (type 98.6.02x.6xx and type 93.0.96x)
 - 3 / 8 Channel LED Panel (type 93.0.31x)
 - Watch Entrance Unit (type 93.0.35x)
 - Reset Box (type 93.0.35x)
 - Bedroom Buzzer (type 93.0.36x)
 - Local Operator Panel (type 98.6.02x.6xx, 93.0.96x, 93.0.98x.x)
 - Watch Entrance Unit (type 93.0.359, 93.0.35x, 93.0.36x, 93.0.37x)
 - Fire Alarm panel 98.6.021.60x
 - 3) PCU (also called DPU or SAU) - Process Control Units containing the I/O Modules for processing of inputs, outputs, alarms and control loops, consisting of:
 - Model 6030, 12 x Digital input / 8/12 x Digital output executed as Din rail model (Type 98.6.030.7xx).
 - Model 6030, 18 x Digital input / 18x Digital output executed as Din rail model (type 98.6.030.80x).
 - Model 6032, 24 x Digital Input unit executed as Din rail model (type 98.6.032.7xx).
 - Model 6032, 36 x Digital Input unit executed as Din rail model (type 98.6.032.8xx).
 - Model 6034, 16 x Analog input /mixed input output executed as Din rail model (type 98.6.034.7xx)
 - Model 6034, 24 x Analog input /mixed input output executed as Din rail model (type 98.6.034.8xx)
 - Model 6049, Control Processor with redundant network interface executed as Din rail model (type 98.6.049.7xx).
 - Model 6049, Control Processor with redundant network interface executed as Din rail model (type 98.6.049.8xx).
 - Serial Interface Converter (type 91.6.040.40x)
 - Serial Interface Converter (type 91.6.040.80x)
 - Sensor Supply Module (type 98.6.010.7xx)
 - Power Distribution Panel (type 93.4.50x)

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- LCD Operator Panel (type 93.0.96x)
 - Alarm Panel 16 Channel (type 93.0.92x)
 - Window Wiper Panel (type 93.0.95x)
 - Window Wiper I/O-module (type 98.6.030.80x)
 - USB to NMEA interface (type 91.6.040.801)
 - 8-Port NMEA Interface (98.6.040.804)
 - Control Processor E-series 4xLAN (type 98.6.049.80x)
 - HCS Operator Control Panel (type 93.0.99x)
 - Nav. Lights I/O-module (type 98.6.030.8xx)
 - TFT 5.7" Touch Operator Panel (type 93.0.98x.x)
 - Thruster Controller (type 98.6.049.801)
- 4) PMS-Power Management System consisting of:
- All models mentioned under PCU
 - PMS input/output Din module (type 98.6.034.7xx)
 - PMS input/output Din module (type 98.6.034.8xx)
 - Display and Operating module (type 98.6.02x.6xx)
 - 7" TFT Operator Panel (type 98.6.02x.6xx)
 - 8" TFT Operator Panel (type 98.6.02x.64x)
 - 5.7" TFT Operator Panel (type 93.0.98x.x)
 - Change Display and Operating module (type 98.6.02x.6xx, 93.0.96x.x)
- 5) BMS-Bridge Maneuvering System (also called PCS) consisting of:
- All models mentioned under PCU
 - Bridge/Control Room control Lever and Telegraph Panel (type 98.6.021.621x)
 - 7" TFT Operator Panel (type 98.6.02x.6xx)
 - 8" TFT Operator Panel (type 98.6.02x.64x)
 - PCS Control levers (type 98.6.022.62xx, type 98.6.021.62xx)
 - PCS Azimuth Control Lever (type 98.6.022.62xx)
 - Emergency Stop DIN Module (type 98.6.034.7xx)
 - Bridge/Engine Room Telegraph Panel (type 98.6.02x.6xx)
 - Bridge Order Printer Panel (type 98.6.02x.63x)
 - Telegraph and Safety Panel (type 98.6.02x.63x)
 - Governor Panel (type 98.6.02x.60x)
 - Electronic Drive Unit (type 98.6.010.7xx)
 - Electronic Actuator (type 98.0.3xx)
 - BMS Indication / Command Panel (type 98.6.02x.62x)
 - BMS Command Panel (type 98.6.02x.64x)
 - BMS Indication Module (type 98.6.034.7xx)
 - 8.4 inch TFT (type 98.6.02x.6xx)
 - 5.7" TFT Operator Panel (type 93.0.98x.x)
 - Azimuth and Control levers (type 98.6.022.621x, 98.6.022.622x, 98.6.022.623x, 98.6.022.624x)
- 6) DP-Dynamic Positioning System consisting of:
- All models mentioned under PCU
 - 7" TFT Operator Panel (type 98.6.02x.6xx)
 - 8" TFT Operator Panel (type 98.6.02x.64x)
 - Joystick and Rate Of Turn Panel (type 98.6.02x.6xx)
 - MRU (98.0.231.x)
- Inclinometer (type 98.0.23x) for Anti Heeling Function
- 7) UPS - Uninterruptible Power Supply comprising of:
- UPS-250-DC 1x230Vac (type NI12.0201)
 - UPS-500-DC 2x230Vac (type NI12.0302)
 - UPS-500-DC 1x230Vac, 1x24Vdc (type NI12.0303)
 - UPS-750-DC 2x230Vac (type NI12.0402)
 - UPS-750-DC 1x230Vac, 1x24Vdc (type NI12.0403)
 - UPS-1000-DC 1x230Vac (type NI12.0501)
 - UPS-1000-DC 1x230Vac, 1x24Vdc (type NI12.0503)
 - UPS-1500-DC 1x230Vac (type NI12.0601)
 - UPS-1500-DC 1x230Vac, 1x24Vdc (type NI12.0603)
 - Sensor Supply Module (type 98.6.010.7xx)
 - Power Distribution Panel (type 93.4.50x)
 - Praxis Earth Fault Detection Module (type 91.6.040.20x)
 - UPS input module (type 93.4.504)
 - UPS distribution module (type 93.4.503)

2. Basic software/firmware:

Device	Pro-series	E-series	Description
MPC	CAMMAN.EXE (rev.4.xx, 5.xx)	-	G-Data Marine Personal Computer
MPC	MEGA-GUARD.EXE (rev.6.xx)	MEGA-GUARD (rev.6.xx)	Data collection, central visualization and HMI
XP	60XX_XXX.HEX (rev.1.xx, 2.xx, 3.xx, 4.xx)	-	Data processing
XP	DIN (rev. 2.x)	app-xxx; loader-xxx (rev2.x)	Data processing
Local Operator Panel /LCD Panel	LOP_XXX.HEX (rev. 1.xx)	app-xxx; loader-xxx (rev2.x)	Data processing, Local data visualization and local HMI
Functional keyboard	Functional keyboard (rev. 2.xx, 3.xx)	Functional keyboard (rev. 2.xx, 3.xx)	Dedicated (limited) operator keyboard
I/O Modules (DIN, DIN/DOOUT, AIN, MIXED)	IO Module (rev. 2.x)	IO Module (rev. 2.x)	Data acquisition
Stand-alone Panels	PANEL (rev.1.x)	PANEL (rev.1.x)	Stand-alone panels (Alarm Panel and Window Wiper) data processing and visualization