



# TYPE APPROVAL CERTIFICATE

Polish Register of Shipping certifies that the undernoted product type

**Integrated Alarm-monitoring, Control and Automation System**

**G-Data, Maxi/Mega Guard Pro-Series and E-Series**

issued to

**Praxis Automation Technology B.V.  
Zijldijk 24A  
2352 AB Leiderdorp  
THE NETHERLANDS**

is approved as complying with the requirements of the

PRRS Rules and is suitable for use on board of ships classified by PRRS  
or in appliances with PRRS certificates.

Certificate No. **TE/1019/883128/21**

Expiry date **2026-10-05**

Issued at

**Gdańsk, 2021-10-29**



**C/020/58**

Polski Rejestr Statków S.A.  
al. Gen. Józefa Hallera 126  
80-416 Gdańsk, Poland

Tel. +(48) 58 346 17 00  
Fax +(48) 58 346 03 92

*[Handwritten Signature]*  
Signature  
mailbox@prs.pl  
www.prs.pl

Continued overleaf

Product description:

Various components and modules used to build alarm and monitoring systems, control of auxiliary machinery systems, automation systems and power management systems.

Technical data:

Power supply of system (main and back-up): 24 V DC.

Enclosure protection degree of equipment and components: IP20 / IP22 / IP44 / IP56.

Ambient temperature: -15°C .. +55°C / +70°C (see technical specification for each module).

Maximum relative humidity: 96% non-condensing.

Intended for dynamic positioning class: DP0 / DP1 / DP2.

Connection interface: Ethernet or CAN-Bus.

Type designation:

See Appendix to this Certificate.

Basis of approval

1. The technical documentation approved by PRS on 2021-10-29.
2. The inspection of the production process and quality control system carried out on 2021-10-05.
3. The Quality Management System (ISO 9001:2015) Certificate No. 10387544 issued by Lloyd's Register.
4. Reports from environmental tests carried out acc. to PRS Publication 11/P (Ed. 07.2021).
5. PRS Survey Report No. SZC/TS/248/21 issued on 2021-10-05.
6. The previous PRS Type Approval Certificate No. TE/2135/883128/16.

Additional conditions and remarks:

1. System configuration is to be approved by PRS for each application (required documents: block diagram, equipment and components list, FAT procedure). Each system is to be tested at the manufacturer workshop (after approval of a.m. technical documentation).
2. Fire alarm panel and navigation light panel configuration is to be approved by PRS for each application (required documents: block diagram, equipment and components list).
3. The condition for maintain validity of this Certificate is to maintain validity of A/M ISO9001 Certificate.
4. Each product is to be marked with: manufacturer name/logo, type, serial No., power supply rated voltage.
5. Manufacturing place: Leiderdorp, The Netherlands.

Notes

- 1 The approval is valid only when the product is used in accordance with the manufacturer's conditions.
- 2 Changes of product design and materials which influence product quality are to be agreed with PRS.
- 3 Type Approval Certificate will be cancelled in the case of dissatisfactory service results, modifications made in the product structure or materials without PRS' consent, not advising PRS of the manufacturer's name change.

**Polish Register of Shipping** means Polski Rejestr Statków S.A., seated in Gdańsk, al. gen. Józefa Hallera 126, 80-416 Gdańsk, Poland, registered in the Register of Entrepreneurs of the National Court Register, under entry number 0000019880. Polish Register of Shipping, its affiliates and subsidiaries, their respective officers, employees or agents are, individually and collectively, referred to as Polish Register of Shipping or as PRS for short.

In carrying out survey activities, PRS makes efforts to ensure that they are conducted with conscientiousness and the principles of good practice, with due regard paid to the state-of-the-art technology. However, neither PRS nor its Surveyors shall bear any civil liability for damage, loss or expense which may arise in consequence or as the outcome of conducting these activities, or the result of information or advice given to the customer by PRS, irrespective of whether or not such were the result of neglect, error or lack of proper information. Nevertheless, should the customer prove that such damage, loss or expense was due to negligence on the part of the Society or its Surveyors, PRS will pay compensation to the customer for his loss up to but not exceeding the amount due for services provided, forming the basis of the customer's claim. In no cases will PRS be responsible for indirect losses (loss of prospective profits, loss of contract, inability to undertake activities) sustained by the customer and associated with the executing of a commission by PRS.



Mega Guard Pro-Series and Mega Guard E- Series, consisting of:

1. OWS - Operator Work Station (also named 'All in one' Work Station) for the following typical processes:

- Alarm/Control and Monitoring
- Pump- and Valve Control
- Duty Alarm System
- Patrol Alarm System
- Electrical Power Management
- Main Engine Control
- PID Control
- Graphic presentation of ship's data
- Dynamic Positioning

The OWS comprises the following components:

- Model 6001 Marine Personal Computer; including redundant network interface (type 98.6.001.7xx)
- Model 6001 Marine Personal Computer; including redundant network interface (type 98.6.001.8xx)
- TFT color Graphic screen (type 98.6.02x.6xx.x)
- 17" widescreen TFT LCD monitor (type 98.6.02x.6xx)
- 26" widescreen TFT LCD monitor (type 98.6.02x.6xx)
- 5,7" TFT Touch Operator Panel (type 93.0.98x)
- 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)
- Operator Keyboard (type 93.6.02x.00x)
- Engineering Keyboard (type 76.0.200)
- Keyboard/ Tracker ball (type 93.6.02x.x0x)
- Tracker ball Controller (type 98.6.022.632)
- Joystick Controller (98.6.022.631)
- Ethernet HUB/Router (type 76.0.81x)
- Ethernet switch 8 ports 24VDC (type 76.0.85x)
- Ethernet switch 8 ports 24VDC (type 98.6.040.802)
- Ethernet switch 18 ports 24VDC (type 98.6.040.803)
- Ethernet switch 24 ports 24VDC (type 76.0.84x)
- 6010 Fieldbus Driver Board (type 98.6.010.7x0)
- DIN module Media converter RJ45 <-> Fiber ST (type 98.6.040.806)
- 8-port NMEA Interface (98.6.040.804)

2. EAS - Extension Alarm System for the remote alarm indication, consisting of:
  - 5,7" TFT Touch Operator Panel (type 93.0.98x)
  - Local Operator Panel (type 98.6.02x.6xx)
  - Local Operator Panel (type 93.0.96x.x)
  - 3 / 8 Channel LED Panel (type 93.0.31x)
  - Fire Alarm Panel (type 98.6.021.60x)
  - Watch Entrance Unit (type 93.0.35x, 93.0.36x, 93.0.37x)
  - Reset Box (type 93.0.35x)
  - Bedroom Buzzer (type 93.0.35x and 93.0.36x)
  
3. PCU - Process Control Units Maxi-Guard/Mega-Guard DIN Rail Model (also called DPU or SAU) 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 18 x Digital output executed as Din rail model (Type 98.6.030.8xx)
  - 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 executed as Din rail model (type 98.6.034.8xx)
  - Model 6034, 24 x Analog mixed input/ output executed as Din rail model (type 98.6.034.8xx)
  - Model 6034, Addressable fire alarm input output executed as Din rail model (type 98.6.034.8.xx)
  - 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).
  - Display Panel (type 98.6.02x.6xx)
  - Serial Interface Converter (type 91.6.040.40x)
  - Serial Interface Converter (type 98.6.040.80x)
  - USB to NMEA Interface (type 98.6.040.80x)
  - Sensor Supply Module (type 98.6.010.7xx)
  - Alarm Panel 16 Channel (type 93.0.92x)
  - Navigation Lights Panel (type 93.0.93x)
  - Nav. Lights I/O-module (type 98.6.030.8xx)
  - Fire Alarm Panel (type 93.0.94x)
  - Window Wiper Panel (type 93.0.95x)
  - Window Wiper I/O-module (type 98.6.030.8xx)
  - LCD Operator Panel (type 93.0.96x.x)
  - DP Thruster Controller (type 98.6.049.801)
  - 5,7" TFT Touch Operator Panel (type 93.0.98x)
  
4. BMS - Bridge Maneuvering system (also called PCS) consisting of:
  - All models mentioned under PCU
  - Bridge/ Control Room control Lever and Telegraph Panel (type 98.6.02x.62x)
  - Emergency Stop DIN Module (type 98.6.034.7xx)
  - Bridge/ Engine Room Telegraph Panel (type 98.6.02x.6xx)
  - Electronic Drive Unit (type 98.6.010.7xx)
  - Electronic Actuator (type 98.0.3xx)
  - 7" TFT Operator Panel (type 98.6.02x.6xx)
  - 8" TFT Operator Panel (type 98.6.02x.6xx)



- BMS Indication Panel (type 98.6.02x.64x)
- BMS Indication Module (type 98.6.034.7xx)
- PCS Control lever (type 98.6.022.621x)
- PCS Azimuth control lever (type 98.6.022.622x)
- Control lever (type 98.6.022.623x)
- Azimuth lever (type 98.6.022.624x.x)
- Joystick controller (type 98.6.022.631)

5. 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)
- Local Operator Panel (type 98.6.02x.6xx)
- 7" TFT Operator Panel (type 98.6.02x.6xx)
- 8" TFT Operator Panel (type 98.6.02x.64x)
- Display and Operating module (type 98.6.02x.6xx)

Overload trip, Reverse Power Trip, Low-/High Frequency trip, Low- / High Voltage trip, Standby Start, Synchronizing, Preferential Trip, Load Sharing, Low Load Stop, Manual Start/ Stop, Safety System. Application software version 1.x (up to 3 DG's), version 2.x (up to 5 DG's), version 3.x (up to 9 DG's)

6. Bridge Navigational Warning & Alarm System comprising of:

- Local Operator Panel (type 98.6.02x.6xx and 93.0.96x)
- 5,7" TFT Touch Operator Panel (type 93.0.98x)
- DIN IO-Module BNWAS 98.6.030.805

7. Dynamic Positioning system comprising of:

- All models under PCU
- All models under OWS
- 7" TFT Operator Panel (type 98.6.02x.6xx)
- 8" TFT Operator Panel (type 98.6.02x.6xx)
- Joystick and Rate of Turn Panel (type 98.6.02x.6xx)
- DP Thruster Controller (type 98.6.049.801)

8. AHS – Components for Anti Heeling System comprising of:

- Inclinometer (type 98.0.23x)
- All models under PCU
- All models under OWS

9. Uninterruptable Power Supply\* comprising of:

- 230VAC Series UPS
- 24VDC Series UPS
- UPS Input Module (93.4.504)
- UPS Distribution board (93.4.501)

- *power supplies and batteries are Type Approved independently (third party equipment).*