

CERTIFICATE NUMBER EFFECTIVE DATE EXPIRY DATE ABS TECHNICAL OFFICE 22-2223418-1-PDA 07-Nov-2023 16-Mar-2027 Houston ESD - Electrical

## CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

### SEATRONX LLC

located at

### 2470 N DECATUR BLVD, SUITE 165, , LAS VEGAS, NV, United States

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product:	Monitor, Panel PC and TFT Monitor Units
Model:	PHT-10, SRT-10, PHT-12, SRT-12, PHT-15, SRT-15, PHT-15W, SRT-15W, PHT-17, SRT-17, PHT- 185W, SRT-185W, PHT-19, SRT-19, PHT-21W, SRT-21W, PHT-24W, SRT-24W, PHT-24, SRT-24, PHT-27, SR
Endorsements:	
Tier:	5 - Unit Certification Required

This Product Design Assessment (PDA) Certificate remains valid until 16/Mar/2027 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

#### Soheni Haque

Soheni Haque, Sr. Managing Principal Engineer

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

SEATRONX LLC 2470 N DECATUR BLVD SUITE 165 LAS VEGAS NV United States Telephone: 800-607-1460 Fax: Email: tony@seatronx.com Web: www.seatronx.com Tier: 5 - Unit Certification Required

# Product:Monitor, Panel PC and TFT Monitor UnitsModel:PHT-10, SRT-10, PHT-12, SRT-12, PHT-15, SRT-15, PHT-15W, SRT-15W, PHT-17, SRT-17, PHT-185W, SRT-185W, PHT-19, SRT-19, PHT-21W, SRT-21W, PHT-24W, SRT-24W,<br/>PHT-24, SRT-24, PHT-27, SRT-27, MPC-E10-1300

#### **Endorsements:**

Intended Service: Bridge Navigation Displays and Control Displays with Marine Computer

#### **Description:**

PHT = Pilothouse standard brightness with bonded touch screen

SRT = Sunlight readable with bonded touch screen

PHT/SRT family:PHT-10, SRT-10, PHT-12, SRT-12, PHT-15, SRT-15, PHT-15W, SRT-15W, PHT-17, SRT-17, PHT-185W, SRT-185W, PHT-19, SRT-19, PHT-21W, SRT-21W, PHT-24W, SRT-24W, PHT-24, SRT-24, PHT-27, SRT-27

- Glass Bridge Displays with up to 1500 Nits Sunlight Readable and optional dimming
- NEMA 4, IP65 Sealed Front Panel
- HDMI, DVID, VGA & Composite Video Input
- Front Brightness Controls
- Standard PCAP Touch Screen

MPC-E10-1300: Marine Computer

#### **Rating:**

Nominal Voltage: 24 VDC Compass safe distances: Standard compass: 1.3m, Steering compass: 0.8m

MPC-E10-1300: Marine Computer

- Processor Intel® Tiger Lake:
- i3-1115G4E or i3-1115GRE (dual-core, 3.00 GHz)
- i5-1145G7E or i51145G7 (quad-core, 2.60 GHz), i5-1135G7E (quad-core, 2.40 GHz)
- i7-1185G7E or i7-1185GRE (quad-core, 2.80 GHz)
- Ports: 4x USB 3.0; 1x DVI, Display Port, HDMI Output(option); 2x RS232/422/485; 1x Audio Out Jack, 2x Giga LAN;
- 8x isolated DIDO, 4 in/ 4out, 8x NMEA 0183 Port
- Power: 24Vdc

#### Service Restriction:

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

#### **Comments:**

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product. Applicable tests for protected equipment according to IEC 60945 except salt mist and acoustic noise.

#### Notes/Drawing/Documentation:

Drawing No. EMC, EMC test report, Revision: 1, Pages: 7 Drawing No. EMC, EMC test report, Revision: 1, Pages: 5 SEATRONX LLC 2470 N DECATUR BLVD SUITE 165 LAS VEGAS NV United States Telephone: 800-607-1460 Fax: Email: tony@seatronx.com Web: www.seatronx.com

#### Tier: 5 - Unit Certification Required

Drawing No. corrosion, corrosion waiver, Revision: 1, Pages: 4 Drawing No. letter, Letter for Seatronx from winmate, Revision: na, Pages: 2 Drawing No. safety, safety & Reliability, Revision: 1, Pages: 6 Drawing No. DNV, DNV Cert, Revision: NA, Pages: 1

Supporting Documents from Previous Tasks: Drawing No. EMC-116-2021, EMC-116-2021, Revision: 0, Pages: 1 Drawing No. EMC-128-2020, EMC-128-2020, Revision: 0, Pages: 1 Drawing No. ENV-006-2021, ENV-006-2021, Revision: 0, Pages: 1 Drawing No. ENV-045-2020, ENV-045-2020, Revision: 0, Pages: 1 Drawing No. ISO-9001-2015-Cert, ISO-9001-2015-Cert, Revision: -, Pages: -Drawing No. N Line block drawing , N line block drawing , Revision: 0, Pages: 1 Drawing No. N-LINE-DECLARATION OF SIMILARITY\_V2, N-LINE-DECLARATION OF SIMILARITY\_V2, Revision: 2, Pages: 1 Drawing No. NOT-IEC60945-plan2020-7, NOT-IEC60945-plan2020-7, Revision: 0, Pages: 1 Drawing No. operational checks, operational checks, Revision: 0, Pages: 1

#### **Terms of Validity:**

This Product Design Assessment (PDA) Certificate remains valid until 16/Mar/2027 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

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#### **STANDARDS**

#### ABS Rules:

Rules for Conditions of Classification (2023) – Marine Vessels 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following: 2023 Rules for Building and Classing Marine Vessel Rules: 4-8-3/1.7, 4-9-9/3 & 7, 4-9-9/13, 4-9-9/Table 1

The Rules for Conditions of Classification of Offshore Units and Structures 2023, 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following: 2023 Rules for Building and Classing Mobile Offshore Units: 4-1-1/7.9, 4-3-1/11, 6-1-1/9, 6-1-1/13

**National:** NA

International: IEC 60945, 2008

**Government:** NA SEATRONX LLC 2470 N DECATUR BLVD SUITE 165 LAS VEGAS NV United States Telephone: 800-607-1460 Fax: Email: tony@seatronx.com Web: www.seatronx.com

#### Tier: 5 - Unit Certification Required

#### EUMED: NA

#### **OTHERS:**

IACS UR E10 Test Specification for Type Approval Rev. 8 2022