



**DNV**

# EUROPEAN UNION RECOGNISED ORGANISATION (EU RO) MUTUAL RECOGNITION TYPE APPROVAL CERTIFICATE

Certificate No:  
**MRA000003M**

In accordance with Article 10.1 of EU Regulation 391/2009

This Certificate is issued to

**Data Respons Solutions AS**  
**Høvik, Norway**

for

**Computers and Programmable Logic Controllers**

with type designation(s)

**CE-CL-0x - Maritime computer**

The product is found to comply with

**EU RO Mutual Recognition Technical Requirements for Computers and Programmable Logic Controllers**

Intended service

**Computers for control, monitoring, alarm, and safety functions subject to classification requirements.**

**Temperature [°C]: -15°C to 70°C**

**Vibration: ±1 mm / 0.7 g**

**EMC: All locations including bridge and open deck**

**IP Code: IP20**

## This is to certify:

that the Product referred to herein has been inspected for the Manufacturer, pursuant to the relevant requirements of the European Union Recognised Organisation Mutual Recognition procedure, required by Article 10.1 of EU Regulation 391/2009, and has been found in accordance with those requirements.

This Certificate is valid until **2027-01-19**.

Issued at **Høvik** on **2022-01-20**

DNV local station: **Oslo Maritime and CAP**

for **DNV**

Approval Engineer: **Martin Skårerverket**

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**Trond Sjøvåg**  
**Head of Section**

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.



Form code: MRTA 201

Revision: 2021-03

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## Product description

The maritime fanless computer CE-CL-0x is a rugged and reliable high-performance computer designed for maritime and offshore applications. The computer is based on 8<sup>th</sup>/9<sup>th</sup> generation Intel® Core™ Coffee Lake-S processor with Dual channel DDR4-2666 SO-DIM memory sockets, with support up to 32GB. The computer come with a fanless minimalistic enclosure providing a reliable platform in harsh environments.

### Key features:

- 8<sup>th</sup>/9<sup>th</sup> generation Intel® Core™ Coffee Lake-S processor
- Dual channel DDR4-2666, SO-DIM, non-ECC support, up to 32GB
- 1 x M.2 SATA (2280) β+M Key
- 4 x ethernet (RJ45)
- 4 x USB 3.0 Type A, 1 x USB 3.0 Type C
- 1 x RS323/442/485 isolated, DB9 connector
- 2 x DisplayPort

Power input: Only 24 VDC (DC/DC module: PW2412)

### Compass safe distance:

Standard:	220 cm
Steering:	130 cm

Tested software version: ZC10-005

## Manufactured by

Data Respons Solutions AS  
Industriveien 25  
NO-2020 Skedsmokorset  
Norway

## Application/Limitation

This approval covers hardware only. This excludes firmware, application software, and hardware designed for specific applications subject to classification. Firmware, system software, and application software are subject to additional separate approval, according to UR E22 and the rules of the classing RO (FAT and on-board review / tests).

## Type Approval documentation

### Marking of product

The products to be marked with:

- manufacturer name
- model name
- serial number
- power supply ratings

### Other Conditions

The unit have been verified for compliance with EU Mutual Recognition Technical Requirements for Computer and programmable logic computers (PLC) version 0.6, dated 2020-05-01.

Applicable tests according to IACS Unified Requirements E10 rev. 7 and rev. 8. have been verified.

Environmental test parameters:	DNV location classes
Temperature -15 to 70°C	B
Humidity: 93% RH @ 55°C, damp heat cyclic	B
Vibration: ± 1mm / 0.7 g	A
EMC: All locations including bridge and open deck.	B
Enclosure: IP20	A

### Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed annually and at renewal of this certificate.

END OF CERTIFICATE

## Generic Statement for EU RO MR Type Approval Certificate

When a product is presented with this EU RO MR Type Approval Certificate for given application, its acceptability with regards to the limitations stated in the certificate conditions defined in 1b, 1c and 1d of the applied Technical Requirement will be evaluated by the EU RO in charge of classing the ship or being in charge of the unit/system certification.

In accordance with Article 10 of Regulation (EC) No 391/2009 of the European Parliament and of the Council of 23 April 2009 "on common rules and standards for ship inspection and survey organizations", the following organizations, recognized by the EU on this date, have agreed on the technical and procedural conditions under which they will mutually recognize this certificate:

- American Bureau of Shipping (ABS);
- Bureau Veritas (BV);
- China Classification Society (CCS);
- Croatian Register of Shipping (CRS);
- DNV;
- Indian Register of Shipping (IRS);
- Korean Register (KR);
- Lloyd's Register Group Ltd. (LR);
- Nippon Kaiji Kyokai General Incorporated Foundation (ClassNK);
- Polish Register of Shipping (PRS);
- RINA Services S.p.A. (RINA);
- Russian Maritime Register of Shipping (RS).

The scheme for the mutual recognition of class certificates for materials, equipment and components laid down by Article 10(1) of Regulation (EC) No 391/2009 is only enforceable within the Union in respect of ships flying the flag of a Member State. As far as foreign vessels are concerned, the acceptance of relevant certificates remains at the discretion of relevant non-EU flag States in the exercise of their exclusive jurisdiction, notably under the United Nations Convention on the Law of the Sea (UNCLOS). (In accordance with COMMISSION IMPLEMENTING REGULATION (EU) No 1355/2014 amending Regulation (EC) No 391/2009 - recital (25)).