## The 13th Gen Intel<sup>®</sup> Core<sup>™</sup> Processor Marine Fanless System

# CE-RL-01





# **Main Features**

- The 13th Gen Intel<sup>®</sup> Core<sup>™</sup> i7/i5/i3/U300E processor
- 2 x DDR5 supported, up to 64GB Max
- 2 x M2 SATA and NVMe supported
- 4 x 2.5GbE RJ45 Ethernet
- 4 x DP++
- 1 x USB 3.2 Gen 2x1 (10Gbps) Type-C, with ALT mode
- 4 x USB 3.2 Gen 2x1 (10Gbps) Type-A
- 1 x RS-232/422/485 isolated

- 1 x Fan/buzzer external connector
- Support Intel<sup>®</sup> vPro and TPM 2.0 (vPro is not available for i3 SKU)
  Support 18V~31V DC in with 2X3 phoenix contact for dual power
- redundancy and low-power monitor detection
- Certificated CE / FCC Class A
- IEC60945/IACS E10 Maritime standards compliance
- Flexible IOs by requested

# **Product Overview**

The CE-RL-01 is a fanless marine computer that complies with international marine standards including DNVGL-CG-0339, IEC 60945, and IACS E10. Powered by 13th Gen Intel<sup>®</sup> Core<sup>™</sup> P processor, it delivers exceptional performance, robust reliability, and high integration for demanding maritime and offshore applications. The CE-RL-01 supports Windows 10, Windows 11, and Linux.

The CE-RL-01 comes with an isolated RS-232/422/485 port, 4 x Gigabit Ethernet LAN ports, 5 x USB ports, and supports multiple video outputs via DP++ and USB Type-C. To meet diverse customer needs, it supports a wide-range 18V $\sim$ 31V DC power input and an extended operating temperature range from 0°C to +55°C that ensures reliable operation in harsh marine environments.

# **Specifications**

## **CPU Support**

- 13th Gen Intel® Core™ processors (embedded)
- Intel<sup>®</sup> Core™ i7-1370PE, vPro supported
- Intel<sup>®</sup> Core<sup>™</sup> i5-1350PE, vPro supported
- Intel<sup>®</sup> Core<sup>™</sup> i5-1340PE, vPro supported
- Intel<sup>®</sup> Core<sup>™</sup> i3-1320PE
- Intel® Processor U300E

## Main Menory

• 2 x DDR5, up to 64GB Max, non-ECC and un-buffered

## Storage Device

• 2 x M.2 2242 or 2280 (SATA and NVMe)

## **Display Option**

Maximum 4 Multiple Displays in Windows and support minimum version 1.4, resolution up to 4096x2160@60Hz

## I/O Interface - Front

- 4 x DisplayPort DP++
- 2 x USB 3.2, 10Gbps, Type-A
- Power on/off switch with LED white indicator

## I/O Interface - Rear

- 1 x Dual power input connector with 2x3 pin terminal block
- + 1 x Fan/buzzer connector: 2x4 pin Phoenix terminal block
- 1 x COM Port (DB9), supports RS-232/422/485, isolated
- 1 x USB 3.2, 10Gbps, Type-C, supports ALT mode
- 2 x USB 3.2, 10Gbps, Type-A
- 4 x 2.5GbE RJ45 port, supports wake up on LAN

#### **Power Requirements**

- Power input: 24V DC input, supports 18V~31V DC in with 2x3 phoenix contact for dual power redundancy and low-power monitor detection
- AT/ATX power mode, default ATX mode

#### Dimensions

- 260mm (W) x 216mm (D) x 55mm (H) without wall-mount bracket
- 292mm (W) x 216mm (D) x 61mm (H) with wall-mount bracket

## Construction

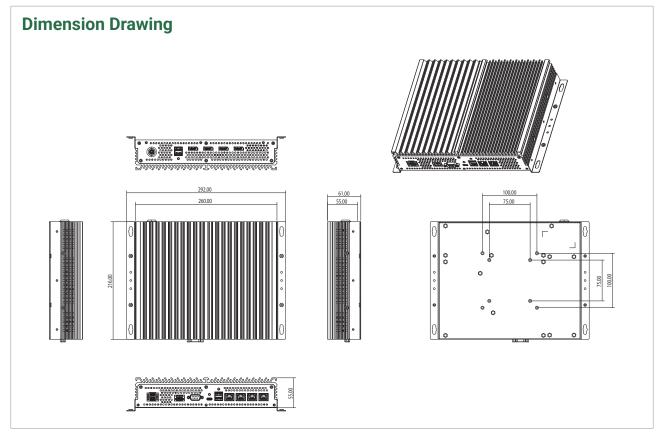
Aluminum/Metal chassis with fanless design

#### Environment

- Operating temperature: 0°C~55°C
- Storage temperature: -30°C~75°C
- Operating humidity: 10%~95%, non-condensing







- Vibration:
  - Compliance with EN 60945 Protected B
  - Vibration compliance with IEC 60068-2-64@Random condition
- Shock:
  - IEC 60068-2-27
  - 20G, 6 directions
  - Drop (Package): IEC 60068-2-32

#### Certifications

- EN 55032/35
- UKCA
- FCC/IC Class A
- UL/CSA 62368-1, 3rd Ed.
- IEC 62368-1: 2018, 3rd Ed.
- IEC 62368-1: 2014, 2nd Ed.

#### Support OS

- Windows 11
- Windows 10

# **Ordering Information**

- CE-RL-01 I7 (P/N: 10Q0000CE11X1) i7-1370PE, 16GB RAM, 256G M.2 SSD
- CE-RL-01 I5 (P/N: 10Q0000CE12X1) i5-1340PE, 16GB RAM, 256G M.2 SSD
- CE-RL-01 I3 (P/N: 10Q0000CE15X1) i3-1320PE, 16G RAM, 256G M.2 SSD