

Manufacturer: **Hatteland Technology AS**

Product: **Industrial Marine Computer (Standard Models)**

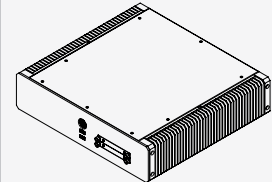
Type: **ENIX-20370**

Last Revised: **09 Jun 2020**
Revision#: **00_10**

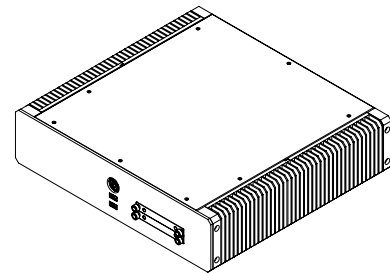
Marine Computer (Standard Models)

Features:

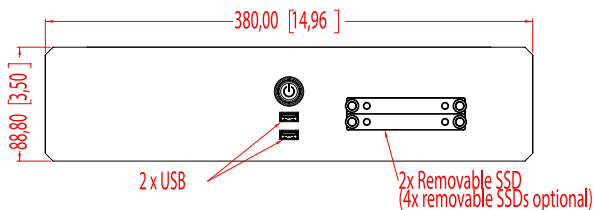
- IEC 60945 certified Marine Computer
- 2U high performance fanless computer
- Aluminum Chassis with heat pipe cooling system
- Intel® Core™ i7, i5 and i3 (LGA 1151) processor
- Isolated 24VDC power input
- 1 x PCIe 3.0 x16
- 1 x PCIe 3.0 x4 (x8 socket)
- 1 x PCIe 3.0 x4
- 1 x PCIe 3.0 x1
- 1 x M.2 2280 M-key (one SATA + NVMe4)
- 1 x M.2 2230 E-Key (PCIe + USB for WiFi)
- Isolated serial ports (optional)
- 2 x Removable SSD tray in front



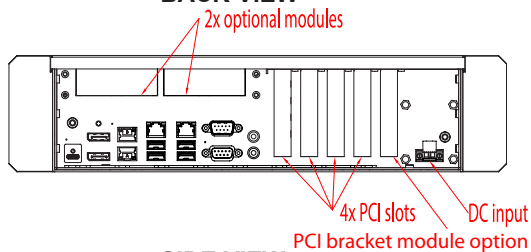
DIMETRIC VIEW



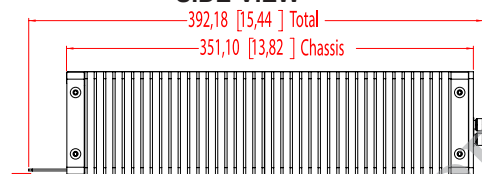
FRONT VIEW



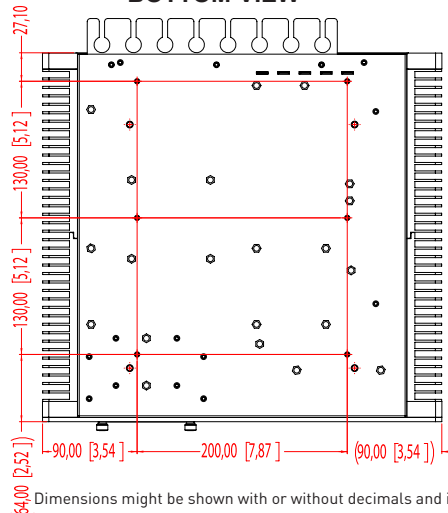
BACK VIEW



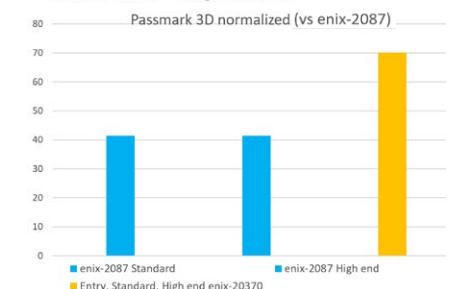
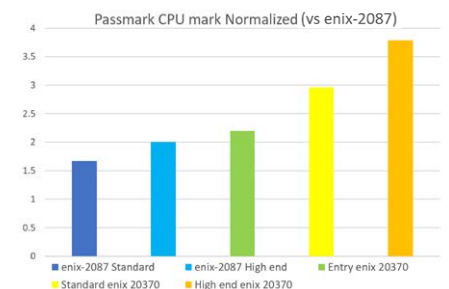
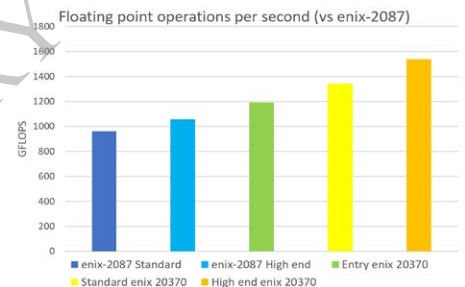
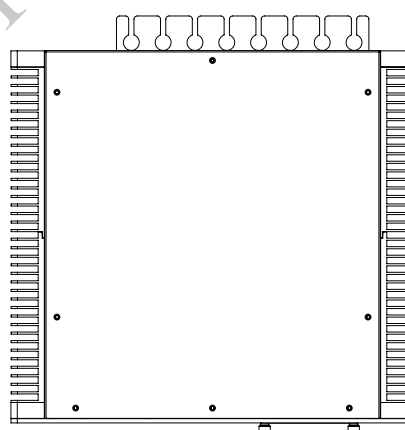
SIDE VIEW



BOTTOM VIEW



TOP VIEW



Dimensions might be shown with or without decimals and indicated as mm [inches]. Tolerance on drawings is +/- 1mm. For accurate measurements, check relevant DWG file.

TECHNICAL DESCRIPTION

Computer Specifications: (Standard model)

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> • Operating System Support • Storage Devices • Processor • Memory/RAM • Graphics • Graphics Capabilities • Max Graphics Resolution • System Chipset • BIOS • PCIe Slots | <ul style="list-style-type: none"> : Windows® 10 IoT Enterprise 2019 LTSC (64bit) : 2 x SATA 3.0 internal (6GB/s) : 1 x Intel® Core™ i5-9500TE, 6-Core 3.60Ghz, 9MB Cache : 1 x 8GB (single channel DDR4) - Max 64GB possible - see table below : 1 x Intel® UHD 630 : DirectX Support 12.0, Shader Model 6.4, OpenCL 2.1, OpenGL Support 4.5/linux), Vulkan 1.1.97 : Max 3840 x 2160 (4K UHD) @ 60Hz for DP (DisplayPort) : Intel® Q370 or later : UEFI support : 1 x PCIe 3.0 x16 (reserved for additional Graphics Card - See Factory Mounted options below) : 1 x PCIe 3.0 x4 (x8 socket) : 1 x PCIe 3.0 x4 : 1 x PCIe 3.0 x1 | <ul style="list-style-type: none"> : 1 x USB-C + 2 x DisplayPort 1.2 |
| <ul style="list-style-type: none"> • M.2 • Ethernet #1 • Ethernet #2 • USB Ports #1 • USB Ports #2 • USB Ports #3 • Serial Port #1 • Serial Port #2 • Audio Onboard • Power Manager • Watchdog Timer • H/W Status Monitor • Other Features | <ul style="list-style-type: none"> : 1 x M.2 2280 M-key (one SATA + NVMe x4) : 1 x M.2 2230 E-Key (PCIe + USB for WiFi) : 2 x LAN 10/100/1000Mbps, Intel®, Support for Intel® Teaming : 2 x LAN 10/100/1000Mbps (non intel) : 2 x USB 3.1 (<3m) ports in front : 1 x USB-C (DisplayPort - Power Distribution enabled) : 4 x USB 3.1 (<3m) ports in rear : 1 x RS-232 Baud Rate: Max 128kbps : 1 x RS-422/RS-485 Baud Rate: Max 256kbps : Realtek HD Audio supports x.x channel, Mic. in, Line out : ACPI : Reset: 1 sec.~255 min. and 1 sec. or 1 min./step : Temperatures, voltages & cooling fan status: Auto throttling control if CPU overheats : LAN Wakeup, USB Boot, Wakeup, Trusted platform module 2.0, Intel® Management Engine. True power on after power fail. | <ul style="list-style-type: none"> : 2 x RJ-45 Teaming : 2 x RJ-45 : 2 x USB Type A : 1 x USB-C : 4 x USB Type A : 1 x DB9M : 1 x DB9M : 2 x 3.5mm Audio Jack |

Power Supply:

- Power Supply:** : Power Consumption - Operating: 70W typical
• 24VDC

External Connector Type:

- External connector type:**
1 x 2-pin Terminal Block 5.08

Available Computer Configurations:

Type	Description	Size/Specification
CPU	1 x Intel® Core™ i3-9100TE 1 x Intel® Core™ i5-9500TE 1 x Intel® Core™ i7-9700TE	4-Core 3.20 GHz, 6MB Cache 6-Core 3.60 Ghz, 9MB Cache 8-Core 3.80 GHz, 12MB Cache
Memory	DDR4SO-DIMM 260-pin	- Uses 2 slots, available sizes are: 1x8GB (2400MHz), 2x8GB (2400MHz), 2x16GB (2400MHz), 2x32GB (2666MHz)
Storage	2.5/M.2" SSD SATA	- 240Gb (0.9PBW), 480Gb (1.2PBW), 960Gb (3.4PBW), 1.92Tb (7.1PBW)
OS Option	Microsoft® Windows® Server 2016/2019 64bit, Windows® Linux: Kernel 4.1x or later version	10 IoT Enterprise 2019 LTSC (64bit).

Factory Mounted Options:

- PNY NVIDIA Quadro P620: PCIe 3.0 x16, 4 x mDP 1.4, 2 GB GDDR5*
- CP114EL-I: 4 Ports COM Card, PCIe x1, 1xDB44F to 4xDB9M isolated, RS-232/422/485)
- Intel® Fiber Network Adapter i350-F2V2 (1GbE), 2 x RJ45
- Intel® Network Adapter i350-T2V2 (1GbE), 2 x LC Fiber Optic
- VSD100897-1: Audio 2W Amplified (1xDB9F+3x3.5mm Jack) Line-in, Line-out, Mic
- ZIA0001310-SLCAN: Socket CAN isolated, 2 channel*
- PCA100298-1 (LAN 10/100Mbps, 2 ports (RJ45) module
- PCA100297-1: Digital IO Isolated, 4 IN + 4 OUT
- ZIA0001310-B: CAN isolated, 2 channel
- PCA100293-1: COM RS-422/485 isolated NMEA 4 channel
- **VSDxxxxxx-x: Additional USB ports.**
- PCA100309-1: Dual Isolated RS-232, 2xDB9 module
- Variations of Storage, RAM Memory and Operating System

* miniDP to DP adapter not included. See accessories below.

Available Accessories:

- 111640: 19" 2U Rack Mount Kit ENIX-20xxx Series
- GHA-SL20: 20" Slide Rail for 19" 2U-4U Chassis
- 114944: Desktop Mounting Kit
- HT 00226 OPT-A1: 2 x Mounting Bracket, 4mm SECC+Zinc Plating, RAL9011
- JH C01MF A-A: 1 x USB Cable 1m, Type A-Chassis mount receptacle
- HT 00300 MSOS: OS options -> <http://www.hatteland-display.com/os>
- HT 00273 OPT-A1: 4 x Digital IN/OUT isolated, USB ext. module
- VSDDPVGA340: DP to VGA adapter
- HT 00262 OPT-A1: 4 x RS-422/RS-485 isolated, USB ext. module
- HT 00263 OPT-A1: 4 x RS-232 COM non-isolated, USB ext. module
- HT 00264 OPT-A1: 1 x CAN isolated, 2 channel, USB ext. module
- 2 x Removable SSD tray in front
- HD 000TR SX1-A1: 1 x Removable Front Tray 2.5" Empty
- HD xxxxy SX1-z1: 1 x Removable Front Tray 2.5" w/Storage Device*
- RC3473 REV.03: DP to DVI adapter

MECHANICAL DESCRIPTION

Physical Specifications:

- W:380.00 [14.96"] x H:88.80 [3.50"] x D:350.66 [13.81"] mm [inch]
- Weight: Approx 7.5 kg / 16.5lbs
- 2U chassis, Aluminum Alloy
- 2 x Removable SSD/HDD tray in front (2.5" size)
- Power/Reset/Power LED Combined Function

Compass Safe Distance: Standard: TBDcm - Steering: TBDcm

Environmental Considerations:

- Operating : Temperature -15 to +55°C - Humidity up to 95%
- Storage : Temperature -20 to +70°C - Humidity up to 95%

Lifetime Considerations:

Even though the test conditions for bridge units provide for a maximum operating temperature of 55°C, continuous operation of all electronic components should, if possible, take place at ambient temperatures of only 25°C. This is a necessary prerequisite for long life and low service costs.

APPROVALS & CERTIFICATES

These products have been tested / type approved by the following classification societies: *=pending

IEC 60945 4th (EN 60945:2002)*

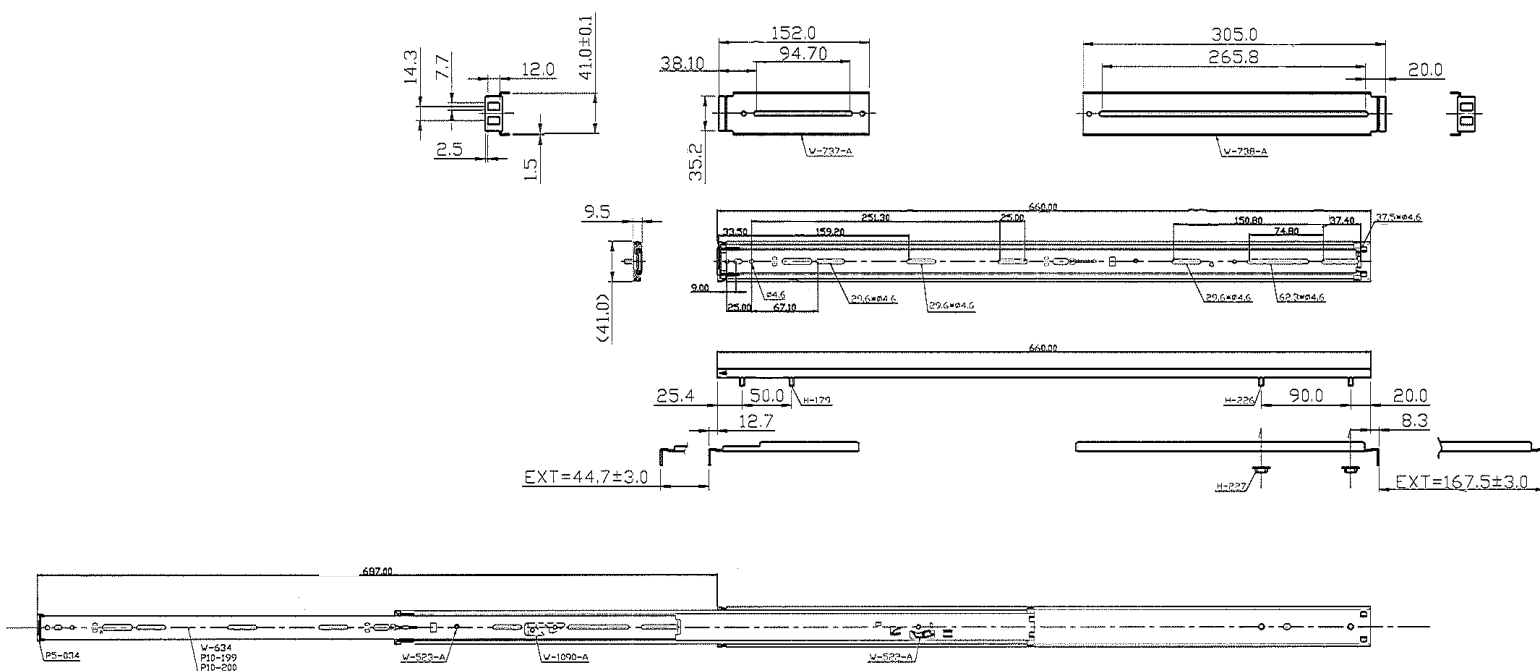
IACS E10*

EN61162*

EU RO MR - Mutual Recognition (covers DNV, BV, ABS, GL, NK and LRS certificates)*

SLIDE RAIL SPECIFICATION

GHA-SL20: 20" Slide Rail for 19" 2U-4U Chassis:



111640: 19" 2U Rack Mount Kit ENIX-20xxx Series:

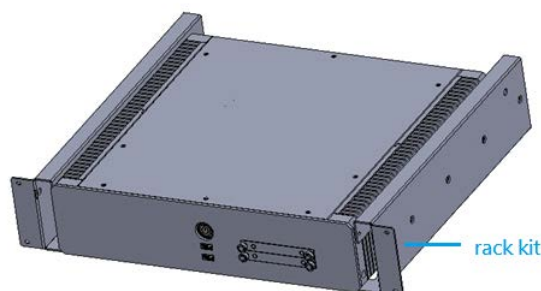
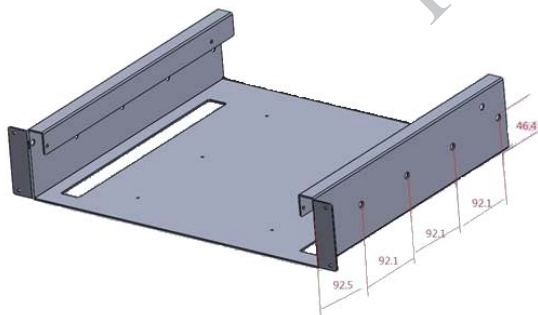
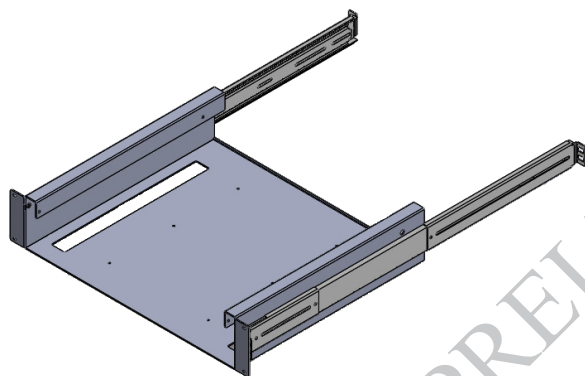
FRONT VIEW

BOTTOM VIEW

BACK VIEW

SIDE VIEW

TOP VIEW



rack kit