



Main Features

- On-board Intel® Atom™ Dual Core D525 processor, 1.8 GHz
- 4x USB ports
- Dual M12 connector for Intel® 82574L GbE LAN ports
- 1x VGA display output
- 2x RS232
- 2x PS/2 for keyboard and mouse
- 1x external CFast socket
- 1x mini-PCIe with two Antenna Holes
- Support +24V DC power input
- Dual cold swappable 2.5" SSD tray
- Supports ATX Power Mode, WoL, LAN teaming and PXE function

Product Overview

nTUF series stands for NEXCOM Tough Computer mainly for Marine Bridge and Control Room computing solution. The nTUF600 Marine Fanless Computer is based on Intel® Atom™ Dual Core D525 platform providing optimized graphic and computing performance with rich interfaces for Marine peripherals connection. The nTUF600 features with 4x USB2.0, 2x M12 GbE LAN port, 1x VGA, 2x DB9 RS232, 2x PS/2, 1x CFast socket and two cold swappable 2.5" SSD trays on the front panel. In the rear side, the nTUF600 offers 4x Digital Input, 4x Digital Output and 4x NMEA ports with 2KV optical protection. The isolated 24V DC input in nTUF600 is designed for Marine applications followed by IEC60945 regulations.

The fanless design and thermal solution on nTUF600 ensure the Marine Bridge System running smoothly and reliably. The front accessible interface design, swappable 2.5" SSD tray and screwed type CFast deliver the benefit of engineering-free and the ease of installation and maintenance.

Specifications

CPU Support

- On-board Intel® Atom™ Dual Core processor D525, 1.8 GHz, 1M cache
- Intel® ICH8M PCHs chipset

Main Memory

- 1 x DDR2 SO-DIMM sockets, support up to 2 GB DDR2 667/ 800 SDRAM, un-buffered and non-ECC

I/O Interface-Front

- ATX power on/off switch
- HDD access/ power status LEDs
- LAN1 & LAN2 status LEDs
- 4x USB2.0 ports
- 2x M12 GbE LAN ports
Intel® 82574L GbE LAN controller on board with 1.5KV surge protection
- 1x VGA output
- 1x DVI-D & 1x HDMI (only work when optional MXM 3.0 graphic module is installed)
- Audio jack (speaker-out & Mic-in & Line-in)
- 2x antenna holes
- 2x DB9, RS232
- 2x PS/2 for keyboard & mouse
- 2x cold swappable 2.5" HDD tray

- 1x external screwed type CFast socket
- 3-pin +24V DC input
- 1x external fuse;10A

I/O Interface-Rear

- 4x Digital Input: 6-pin screw terminals
Voltage level: 5V, TTL-level
- 4x Digital Output: 8-pin screw terminals
36V DC with 100mA relay
- 4x NMEA interfaces
Signal: TX / RX signals
2KV optical isolation protection

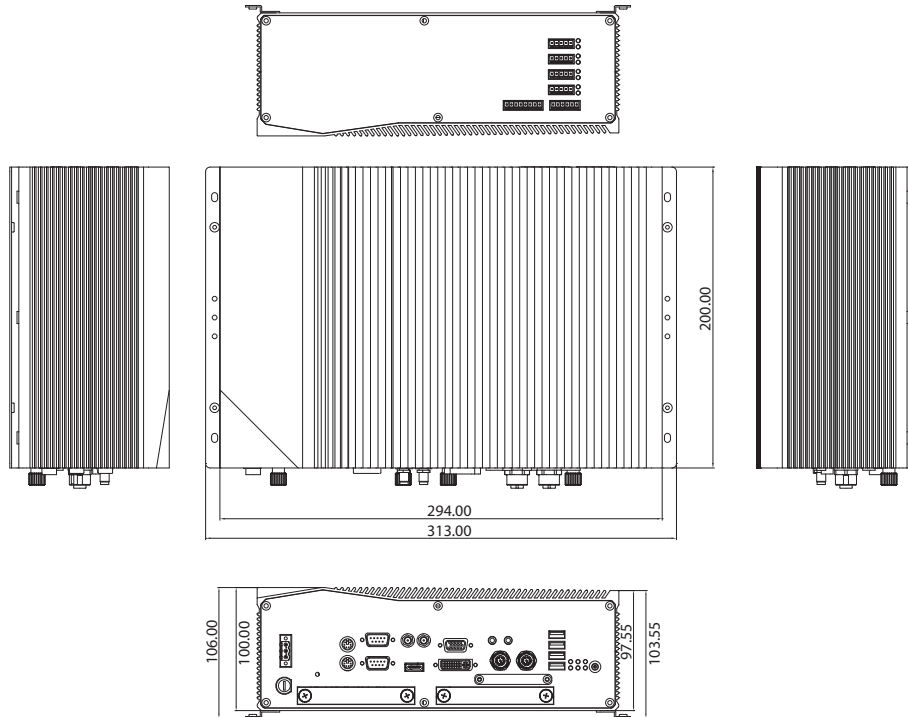
Device

- 2x 2.5" SSD driver bay
- 1x external CFast socket
- 1 x mini-PCIe socket
Default: support optional Wi-Fi module
Option: support optional 3.5G module

Power Requirements

- DC input range: 16V~30V DC input
- Nominal DC input: +24V DC input with 1.5KV isolation protection
- Pin definition: Positive, Negative and Chassis Ground

Dimension Drawing



Dimensions

- 294mm (W) x 200mm (D) x 100mm (H) (11.6" x 7.9" x 3.94")

Construction

- Aluminum chassis with fanless design

Environment

- Operating temperature:
Ambient with air flow: -25°C~55°C
(according to IEC60945, E10 and DNV standards)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (non-condensing)

Certifications

- IEC60945 (in process)
- IACS-E10 (in process)
- DNV 2.4 (in process)

Ordering Information

Barebone

- nTUF 600 (P/N: 10M00060000X2)

Intel® Atom™ Dual Core D525 Fanless Marine Computer