VBOX-3132-IP66

Intel® Atom®/N-series Processor IP66 Rugged Edge Computer



- Industrial Grade Amston Lake Processor and Ethernet Controller
- Intel® Twin Lake Processor SKU Available
- 2 x 2.5GbE Ports for High-Speed Data Transmission
- 2 x Built-in CAN FD for Vehicle Device Communication
- Dual NVMe SSD Support for NVR Applications
- Built-in Watchdog and Smart Power Management for System Health Monitoring
- Supports DIN-rail and Wall-mount Installation

Specifications

System

Processor
- Intel® Twin Lake N150 4-core Processor up to 3.2 GHz
- Intel® Twin Lake N355 Core™ 3 8-core Processor up to 3.9 GHz
- Intel Atom® x7835RE 8-core Processor up to 3.6 GHz

GPU
- Intel® UHD Graphics

Memory
- 1 x DDR5-4800 SO-DIMM up to 16 GB

Security
- TPM 2.0

Watchdog
- Auto reset for unresponsive system (custom 30-255 sec/min settings in BIOS)

Interface

Video
- 1 x HDMI® up to 3840 x 2160 @ 60Hz as specified in HDMI 2.0b

Ethernet
- 2 x 2.5GbE (Intel I226-IT) via M12 X-code

CAN
- 2 x CAN FD

USB
- 1 x USB 3.2 Gen1
- 2 x USB 2.0

DIO
- 3 x DI (DC 9-60V), 4 x DO (DC 5V/100mA)

COM
- 1 x RS-232/422/485
- 1 x RS-232/422/485 (Optional)

Internal Expansion

M.2
- 1 x M.2 3042/3052 Key B for WWAN w/ dual SIM support
- 1 x M.2 2230 Key E for Wi-Fi/BT

Storage

Storage Type
- 1 x M.2 2280 Key M for NVMe SSD
- 1 x M.2 2280 Key M for NVMe/SATA SSD

Certification / Compliance
- CE, FCC Class A, UKCA, E-Mark, EN 62368-1

Power

Power Input
- DC 9-60V (nominal power input DC 12V/24V/48V) via M12 K-coded connector

Power Protection
- OCP, OVP, surge protection, reversed polarity protection

Power Management
- Ignition detection, Smart Power Management

Battery Backup Unit (BBU)
- Optional battery kit for up to 10 minutes emergency backup time (Battery charging Temp. 0°C ~ 45°C and discharging Temp. -10°C ~ 60°C)

Software

Operating System
- Windows 11 IoT Enterprise LTSC
- Ubuntu 22.04/24.04 LTS

Environmental

Operating Temp.
- x7000RE Processor: -40°C ~ 70°C (-40°F ~ 158°F) with 0.6 m/s airflow
- N-series Processor: -30°C ~70°C (-22°F~158°F) with 0.6m/s airflow

*Operating temperature varies by accessories installed.

Storage Temp.
- -40°C ~ 85°C (-40°F ~ 185°F)

Relative Humidity
- 10% RH – 90% RH (non-condensing)

Vibration
- IEC 60068-2-64, random, 2.5G@5~500Hz, 1hr/axis
- MIL-STD-810H, Method 514.8, Procedure I, Category 4

Shock
- MIL-STD-810H, Method 516.8, Procedure I, trucks and semi-trailers=15G (11ms)

Mechanical

Construction
- Aluminum Alloy

Antenna
- 6 x SMA connector mounting hole

Mounting
- DIN-rail mounting
- Wall mounting

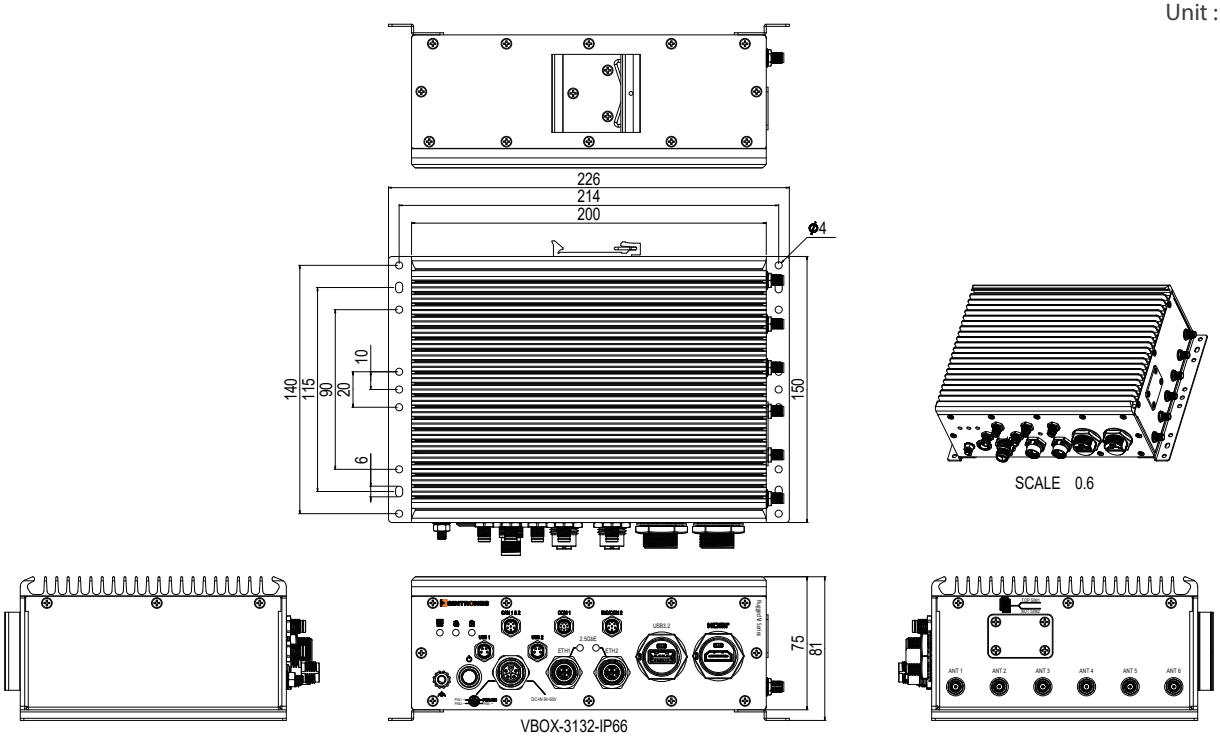
Net Weight
- 2.7 kg (5.95 lb)

Dimensions (L x W x H)
- 200 x 150 x 75 mm (7.87 x 5.91 x 2.95 in.)

Ingress Protection
- IP66

Dimensions

Unit : mm



Ordering Information

Model Number	VBOX-3132-IP66-zzzzz (zzzzz=x7835=Intel Atom® x7835RE, zzzzz=N355 =Intel® Core™ 3 Processor N355, zzzzz=N150 =Intel® Processor N150)
Description	Intel® Atom®/N-series Processor IP66 Rugged Edge Computer

Optional Accessories

State of Origin	Made in Taiwan
Memory	DDR5-4800 SO-DIMM, 8 GB to 16 GB, -40°C ~ 85°C
Storage	M.2 2280 Key M NVMe SSD w/ thermal kit, -40°C ~ 85°C
Wi-Fi	M.2 2230 Key A-E Wi-Fi module, -40°C ~ 85°C
WWAN	M.2 3042/3052 Key B WWAN module w/ thermal kit, -40°C ~ 85°C
GNSS	M.2 2242 Key B GNSS module, -40°C ~ 85°C
Battery (BBU)	BAT-2300 (Operating Temp. : -20°C ~ 60°C (-4°F ~ 140°F)
Power Adapter	AC/DC 100-240V/12V 60W C14 lockable DC plug power adapter

All specifications are subject to change without notice.