



## Main Features

- Built-in Rockchip RK3328 Quad-core ARM® Cortex®-A53 processor up to 1.5GHz
- Built-in u-blox NEO-M9N GNSS module
- 1 x DB9 for full RS232
- 1 x HDMI, (BOM option VGA + Audio)
- WLAN module option (USB interface)
- 1 x M.2 Key B for WWAN with 1 x internal Micro SIM slot
- SDK for power/reset/WDT/IGN/UVP threshold/GNSS on/off control
- Wide operating temperature -20°C ~ 70°C
- Wide range DC input from 9V ~ 36V
- Certified by CE/FCC/E13

## Product Overview

VTC 210 features Quad-core ARM® Cortex®-A53 processor, offering powerful graphics and multimedia enhancements. VTC 210 is rugged, fanless, and compact, designed especially for vehicles with limited space. By default, it comes with an advanced GPS receiver supporting GNSS/Glonass/QZSS/Galileo/Beidou. VTC 210 features WLAN and WWAN wireless data and voice connectivity with an onboard micro SIM slot.

For better protection and control of vehicles, VTC 210 provides SDK control API such as integration modules power/reset on/off, WDT control, ignition delay timer, etc. VTC 210 maintains the flexibility to meet different demands for telematics applications, such as infotainment, fleet management, dispatching system, and in-vehicle gateway.

## Specifications

### CPU

- Rockchip RK3328 Quad-core ARM® Cortex®-A53 processor up to 1.5GHz

### Memory

- DDR4 2GB onboard (BOM option 4GB)

### Storage

- eMMC 16GB onboard
- 1 x Internal microSD slot

### Expansion

- 1 x M.2 3042 Key B (USB 2.0, USB 3.0) for WWAN with 1 x internal Micro SIM
- 1 x USB 2.0 wafer for Wi-Fi module

### GNSS and Onboard Sensor

- 1 x Default u-blox NEO-M9N GNSS module for GPS/Glonass/QZSS/Galileo/Beidou
- G Sensor and gyroscope

### I/O Interface-Front

- 1 x Power button with LED
- 4 x LED for WWAN, WLAN, LAN1, LAN2
- 2 x RJ45 10/100/1000 Fast Ethernet with LED
- 1 x USB 2.0 type A

- 1 x Reset button
- 2 x Antenna holes for WLAN
- 1 x Phoenix connector for power (9 ~ 36VDC)/GND/ignition input

### I/O Interface-Rear

- 1 x HDMI for 1920 x 1080@60Hz output (BOM option 2nd display, 1 x VGA output + 1 x audio jack output (L/R))
- 3 x Antenna holes for WWAN and GNSS

### Power Management

- System power on/off by ignition signal

### Operating System

- Linux

### Dimensions

- 130mm (W) x 100mm (D) x 31mm (H)

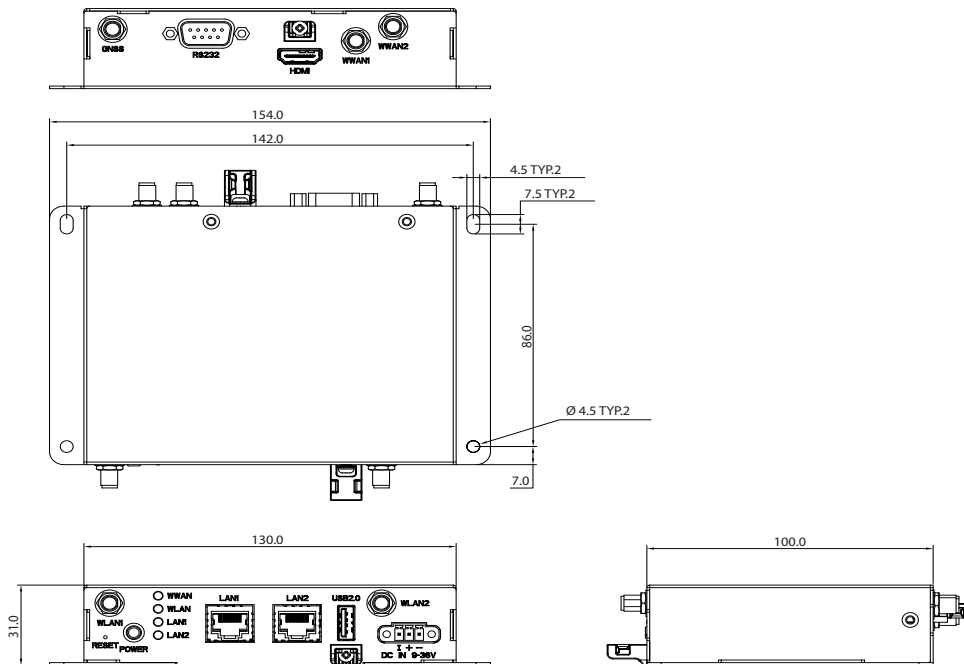
### Weight

- 0.5kg

### Environment

- Operating temperatures: -20°C to 70°C
- Storage temperatures: -40°C to 85°C
- Relative humidity: 90% (non-condensing)

## Dimension Drawing



### Vibration & Shock

- ♦ Vibration
  - Operating: MIL-STD-810H, Method 514.8, Category 4, commoncarrier US highway truck vibration exposure
  - Storage: MIL-STD-810H, Method 514.8, Category 24, minimum integrity test
- ♦ Shock
  - Operating: MIL-STD-810H, Method 516.8, Procedure I, functional shock=40g
  - Non-operating: MIL-STD-810H, Method 516.8, Procedure V, crash hazard shock test=75g

### Certifications

- ♦ CE approval
- ♦ FCC Class A
- ♦ E13 Mark

### Ordering Information

- ♦ **VTC 210 (P/N: 10V00021000X0)**  
 Quad-core ARM® Cortex®-A53 processor, 2GB DDR4, 16GB eMMC, U-blox NEO-M9N GNSS module, HDMI output, 2 x LAN, 1 x USB, 1 x RS232, 9 ~ 36VDC input