



# V12R

## Enterprise-Grade Rugged Vehicle PC

- Equipped with Rockchip RK3568 processor, low-power consumption
- Standard Wi-Fi 5, BT 5.0, optional 4G and data radio communication modules
- Multiple interface options, covering AHD/TNC/SMA/Deutsch interfaces
- Android 12+ Linux dual systems, compatible with a variety of applications
- GPS/GLONASS/Beidou and optional RTK high-precision positioning
- Supports 6V to 36V wide-voltage input, catering to diverse vehicle charging needs



**Durability**

- IP65 compliant
- ±6kV contact discharge, ±10kV air discharge

**Operating System**

- Android 12
- Optional Linux

**Processor**

- RK3568
- Quad-core 64-bit Cortex-A55 processor

**Graphics**

- Mali-G5 2-2EE

**Memory**

- 4GB LPDDR4x

**Storage**

- 64GB Emmc

**Display**

- 10" MIPI HD (800x1280), 700 nits
- 5-point capacitive touch screen
- Optional LVDS (1024x600), 750 nits
- Optional FHD (1200x1920), 700 nits

**Audio**

- Integrated 3W speaker x1
- Microphone x1
- Audio amplifier

**Camera**

- AHD (720P x4, optional 1080P x2) on the board
- Optional AHD (720P x4, optional 1080P x2)

**Keyboard & Input**

- 3 buttons (2 user-definable key)

**Network & Connectivity**

- Wi-Fi 5, dual-band (2.4G/5G)
- Bluetooth 5.0
- Optional 4G LTE Cat 4
- WCDMA : B1+5+8
- TDD : B38+40+41
- FDD : B1+3+5+7+8+20+28
- GNSS module (GPS/BD/Glonass)
- Optional BD-only module
- Optional RTK module
- Optional digital radio module

**Battery & Charging**

- Power input 6-36V&ACC
- RTC

**I/O Interface**

- Micro SD x1
- Nano SIM x1
- USB 2.0 (Type-A) x1
- AHD (720P x4, optional 1080P x2) on the board
- Optional AHD (720P x4, optional 1080P x2) on the EX\_CAB\_FULL\_RS232\_AHD
- Optional TNC x2 (RTK), SMA x2 (4G, digital radio)
- Expansion bus interface
- Optional Expansion bus (EX\_CAB\_FULL)
- Optional Expansion bus (EX\_CAB\_FULL\_RS232\_AHD)
- Optional Expansion bus (EX\_CAB\_FULL\_RJ45\_CAN)
- CAN x2 (MCU CAN)
- Optional CAN x4 (SocketCAN x2+MCU CAN x2)
- Supports J1939

**Expansion Bus**

- Serial port
- RS232 x1 (optional RS232 x2)
- RS485 x1
- 10/100Mbps Ethernet RJ45 x1
- Optional 10/100/1000Mbps Ethernet RJ45 x1
- GX12 x1 (3-pin, power input 6-36V & ACC)
- GX12 x1 (12V output)
- GX12 x1 (GPIO x2 input)
- USB 2.0 (Type-A) x1
- GX12 x4 AHD input (720P x4, optional 1080P x2)
- 3.5mm audio jack x1
- Handheld microphone GX12 x1

**Environment**

- Operating temperature: -20°C to 60°C(MIPI LCD)
- Optional -30°C to 70°C (LVDS LCD)
- Storage temperature: -30°C to 70°C(MIPI LCD)
- Optional -40°C to 85°C (LVDS LCD)
- Humidity: 95% (non-condensing)

**Dimension**

- 282 mm(L) x 181 mm(W) x 31 mm(H)

**Weight**

- 1150g

**Accessories**

- Optional: CN DC Wall Adapter, Power adapter cable, Expansion Bus, Data Radio External Suction Cup Antenna, Base with ball, 4G External Suction Cup Antenna, Vehicle mushroom antenna

**Warranty**

- One-year limited warranty standard

1. Please contact your sales representative for feature availability.  
 2. Battery life data is provided by Emdoor's laboratory. Default test conditions: 300 nits display brightness, 30 cm/70 dB sound level. Actual results may vary depending on test environments and methods.  
 3. Certified to MIL-STD-810H and IP standards. For specific test items and methods, please refer to the latest official test report.  
 4. Body dimensions and weight are measured by Emdoor's laboratory. Variations may occur due to measurement methods and manufacturing processes.  
 5. All product images, specifications, user interface, and features are for reference only and may vary by production batch or other factors. All information is subject to change without prior notice.

## ACCESSORIES

### Optional



CN DC Wall Adapter



Power adapter cable



Expansion Slot



Data Radio External Suction Cup Antenna



Base with ball



4G External Suction Cup Antenna



Vehicle mushroom antenna

## CONTACT US

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