

## V100 Feature and Specifications



- 1) Magnesium alloy shell
- 2) BD970 Mainboard (GPS+GLONASS+BDS)
- 3) Self designed extra mini zero phase antenna board with 6 frequencies support GPS & GLONASS & BDS
- 4) Built-in dual mode Bluetooth: Equip 4.0 standard dual mode long distance working Bluetooth. It can be connected with the main stream mobile and pad such digital products. At the same time, it can be compatible with the 2.1 standard industrial controllers.
- 5) Built-in NFC: Just need to touch lightly, and then the mainframe could be connected with the controller conveniently and speedily.
- 6) Industry low power processing platform, brand new high efficiency intelligent inner platform. With faster calculative ability and lower power consumption. Improve the mainframe integral stability.
- 7) Built-in 8GB SD card.
- 8) Without built-in GPRS module, without built-in radio modem, you need to use controller to receive differential.
- 9) Mainframe working mode: handheld differential rover station, external base station, static

### Technical specification

#### 1. System configuration

Operation system: Intelligent real time system

Start-Up time: 1S

Memory: Internal 8GB memory

#### 2. GNSS configuration:

System kernel: Adopt international first class PCC multi satellite and multi system inner kernel.

Channel number: 220

BDS: B1、B2

GPS: L1 C/A、L2E、L2C、L5

GLONASS: L1 C/A、L1 P、L2 C/A (just limited for GLONASS M) and L2 P

GALILEO: Available if upgrade

Output format: ASC II : NMEA-0183 and binary system: Trimble GSOF

Differential support: sCMRx、CMR、CMR+、RTCM2.1、2.2、2.3、3.0、3.2

3. Accuracy and reliability:

RTK position accuracy: Horizontal:  $\pm 8\text{mm}+1\text{ppm}$ ;

Vertical:  $\pm 15\text{mm}+1\text{ppm}$

Static & fast static accuracy: Horizontal:  $\pm 2.5\text{mm}+1\text{ppm}$ ;

Vertical:  $\pm 5\text{mm}+1\text{ppm}$

Code differential: 0.4m

SABS: 1.2m

Initialization time: Typical 8s

Initialization reliability: >99.9%

Data updating rate: Support 20Hz maximally

4. Internal communication:

◎NFC communication

◎dual mode Bluetooth communication

5. External radio: extra long distance external radio, radio frequency 450MHz-470MHz; Transmission rate: 19.2kbps, 9.6kbps; 116 pcs channels could be changed flexibly.

6. User Interface:

◎Panel: single press button,

◎Indicator LED: Three LED light with two colors changeable, satellite LED, status LED, power LED

7. Electric physical characteristics:

◎Battery: high power capacity lithium battery 6300mAh/3.7V; the battery is



detachable; one battery could support more than 7 hours continuous working under the controller difference working mode.

◎Input voltage: USB interface: direct currency 4.2-5.5VDC~1.5A; small five pin interface: 6-28VDC~1A

◎Size: 127.5mm×57mm

◎Weight: Mainframe: 580g; battery: 120g

◎Power consumption: 3.2W

◎Material: Magnesium alloy shell



#### 8. Environmental characteristics:

◎Dustproof & waterproof: IP67, protected from the temporary immersion to depth of 2 M. Prevent the dust fully.

◎Ant-shock: 2M free fall

◎Relative humidity: Resist 100% condensation

◎Working temperature: -40℃~65℃

◎Storage temperature: -40℃~75℃

#### 9. External interface:

◎1 USB interface: For downloading data and upgrading firmware

◎1 small five pin interface: Connect external radio etc.