



# *GNSS Receiver* **NET660**

Basic System Construction Receiver



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### IP68 Design

Magnesium alloy main body

### Multi-Channel

GPS GLONASS BDS GALILEO  
QZSS NavIC

### Abundant Hardware Interface

PWE DATA PPS SIM Ethernet  
4G GNSS\*1

Safe encrypted data and  
cloud management

Intelligent Linux OS and  
flexible route management



| WIDTH  | HEIGHT | LENGTH | WEIGHT |
|--------|--------|--------|--------|
| 172 mm | 58 mm  | 148 mm | 1920g  |

Comprehensive network coverage  
13800mAh, Over 24 hours  
Cloud service function  
1.3-inch LCD display, visual experience

# NET660 GNSS Receiver

NET660 GNSS receiver is a high-performance device engineered specifically for the construction of ground-based enhancement systems, such as those used with the Beidou navigation satellite system. It boasts an built-in Linux operating system and fully independent intellectual property rights. Its diverse interfaces and communication methods, along with support for event inputs, PPS outputs, and substantial data storage, make it an ideal choice for foundational system construction.

## CHARACTERISTIC

### Linux Intelligent System

Utilizing a Linux + ARM Cortex-A7 system platform, the NET660 offers efficient computation and endless possibilities for product function expansion.

### Comprehensive GNSS Receiver

The device integrates a high-precision positioning module capable of receiving and processing signals from a full array of systems and frequencies, including BDS (B1I/B2I/B3I, B1C/B2a/B2b), GPS (L1CA/L2P/L2C/L5), GLONASS (G1/G2), Galileo (E1/E5a/E5b), QZSS, SBAS, and IRNSS, providing complete system and full-frequency signal reception and solution.

### Advanced Positioning Capabilities

Features narrowband interference resistance and continuous wave interference suppression, enabling rapid initial positioning and fast satellite signal lock for quick and precise data acquisition necessary for subsequent processing.

### Versatile Connectivity Options

Offers Ethernet, WiFi, serial ports, Bluetooth, and mobile network interfaces, allowing for flexible connectivity solutions.

### Protocol Compatibility

Supports a variety of protocols including Ntrip Client/Server/Caster, TCP Client/Server, FTP for file transfers, and HTTP/HTTPS for secure communications over protected networks.

### IP68 Design

Features a robust aluminum alloy casing, designed to meet IP68 standards for durability and reliability, ensuring safe and dependable operation in challenging environment.

# SPECIFICATION

| SYSTEM                      |                                                                                                                                           |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| HARDWARE SYSTEM             | ARM Cortex-A7 1.8GHz                                                                                                                      |
| OS                          | Linux                                                                                                                                     |
| GNSS                        |                                                                                                                                           |
| GPS                         | L1 C/A, L2P(Y), L2C, L5                                                                                                                   |
| GLONASS                     | L1, L2, L3                                                                                                                                |
| BDS                         | B1I, B2I, B3I, B1C, B2b, B2b                                                                                                              |
| GALILEO                     | E1, E5a, E5b                                                                                                                              |
| QZSS                        | L1C/A, L2C, L5                                                                                                                            |
| SBAS                        | L1C/A                                                                                                                                     |
| NavIC(IRNSS)*               | L5*(Requires firmware support)                                                                                                            |
| L-band                      |                                                                                                                                           |
| Standard Output             | NMEA-0183                                                                                                                                 |
| Correction I/O Protocol     | RTCM 3.X                                                                                                                                  |
| Frequency                   | 1Hz, 2Hz, 5Hz, 10Hz, 20Hz max                                                                                                             |
| Reacquisition Time          | <1s                                                                                                                                       |
| Cold Start Time             | <40s                                                                                                                                      |
| ACCURACY                    |                                                                                                                                           |
| Single(RMS)                 | Horizontal: 1.5m / Vertical: 2.5m                                                                                                         |
| DGPS(RMS)                   | Horizontal: 0.4m / Vertical: 0.8m                                                                                                         |
| RTK(RMS)                    | Horizontal: $\pm$ (8mm+1ppm)<br>Vertical: $\pm$ (15mm+1ppm)                                                                               |
| Timing Accuracy (RMS)       | 20ns                                                                                                                                      |
| Static Mode Precision (RMS) | Horizontal: $\pm$ (2.5mm+1ppm)<br>Vertical: $\pm$ (5mm+1ppm)                                                                              |
| Data Availability           | $\geq$ 98%<br>(Data available/Data collected)                                                                                             |
| Data Completeness           | $\geq$ 98%(Data collected /<br>Expected data to be collected)                                                                             |
| INTERFACE                   |                                                                                                                                           |
| Bluetooth                   | BR+EDR+BLE                                                                                                                                |
| WIFI                        | 802.11 b/g/n                                                                                                                              |
| Network                     | Full frequency<br>LTE FDD: B1/2/3/4/5/7/8/12/13/<br>18/19/20/25/26/28<br>LTE TDD: B38/39/40/41<br>WCDMA: B1/2/4/5/6/8/19<br>GSM: B2/3/5/8 |

Ethernet Port Standard RJ45 interface,  
10/100Mbps network adaptive

Serial Port Two 5-pin connectors;  
standard RS232 interface with  
baud rates supporting 9600,  
19200, 38400, 115200,  
and 230400 bps

Storage 32GB storage

## INDICATOR

LCD Display Size: 1.3inch  
Resolution: 240\*RGB\*240

Power Indicator Indicates power and charging  
status

Differential Signal Indicator Indicates the status of  
network connection

Satellite Indicator Indicates satellite reception status

Bluetooth Indicator Indicates Bluetooth connection  
status

## BATTERY / CHARGE

Capacity 7.2V, 13800mAh

Endurance Over 24 hours(Supports  
continuous data collection for  
26 hours on a full charge)

Charging TYPEC - USB PD 15V/2A 5V/3A  
LEMO - 12V/2A DC  
Input supported

## ENVIRONMENT

Operating Temperature -20°C~+60°C

Storage Temperature -20°C~+70°C

Shock Resistance GB/T2423

Protection Rating IP68

## PHYSICAL

Material Magnesium alloy main body

Dimension 172mm\*148mm\*58mm

Weight 1920g

## ACCESSORIES

NET660 1 Unit

Power adapter 1 PCS

Serial Port 2 PCS

WIFI Antenna 1 PCS

4G Antenna 1 PCS

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Manufacturers may update parameters at any time, please refer to the latest product information.

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