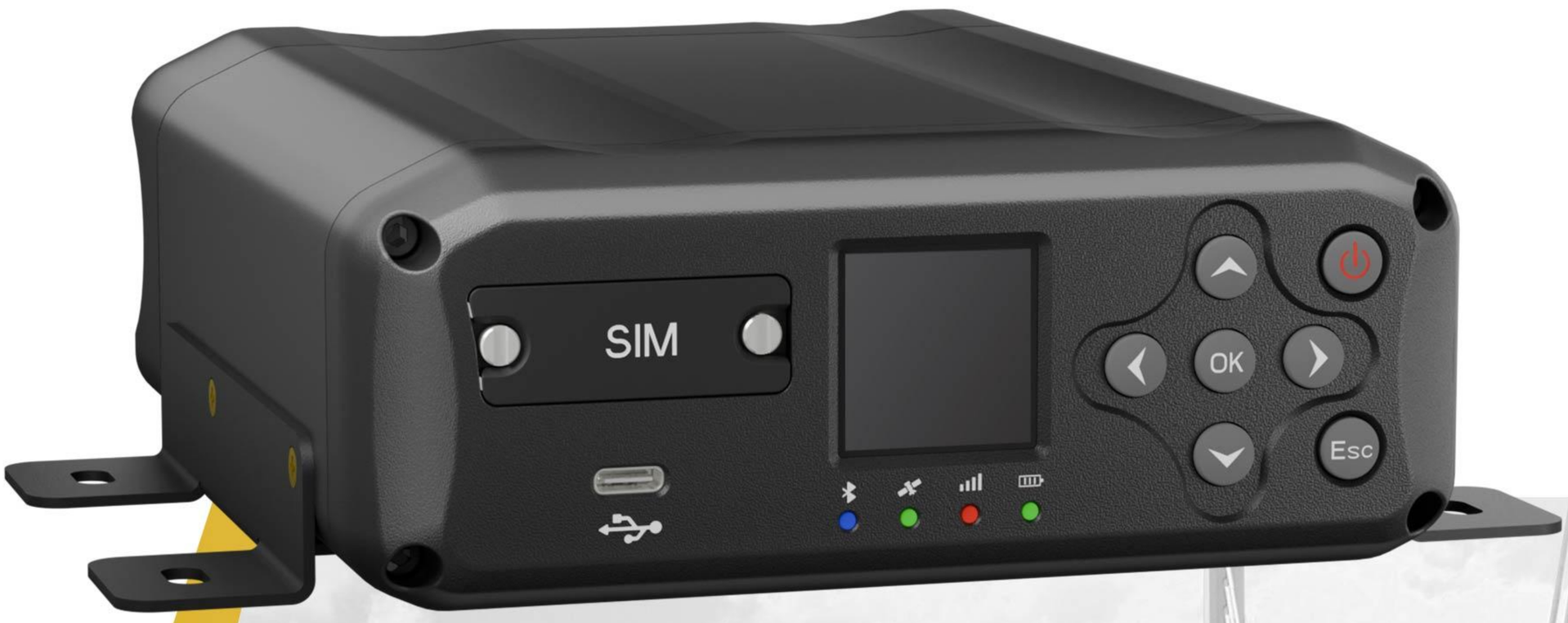
PHEREFIX

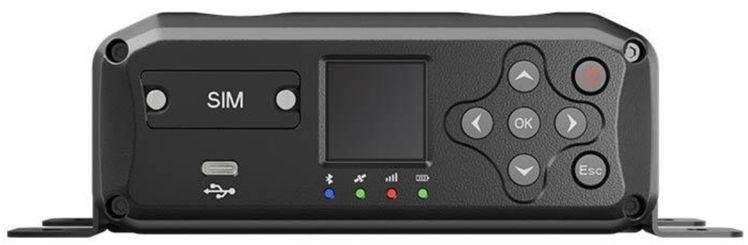
# S66

## BASE STATION RECEIVE



# S66

S66 is a high-performance GNSS receiver that can receive comprehensive satellite signals.It comes with an embedded Linux OS, rapid positioning features, and a variety of interface options including Ethernet, WiFi, serial ports, Bluetooth, and mobile network interfaces. With diverse communication methods and compatibility with multiple protocols, it supports PPP output and large-capacity data storage. Equipped with a high-capacity battery for extended operations, S66 is your top choice for building ground-based augmentation systems.




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

## Comprehensive satellite signal acquisition

A high-precision positioning module with full intellectual property rights, supports comprehensive reception and processing of satellite signals, including BDS B1I/B2I/B3I, B1C/B2a/B2b, GPS L1CA/L2P/L2C/L5, GLONASS G1/G2, Galileo E1/E5a/E5b, QZSS, SBAS, and IRNSS.

## Diverse connectivity options

A variety of communication interfaces are provided for selection, including Ethernet, WiFi, serial ports, Bluetooth, and mobile network interfaces.

## Rapid positioning feature

With narrowband interference resistance and continuous wave interference suppression, it enables fast initial positioning and rapid satellite signal lock and tracking, helping quickly obtain accurate positioning data for subsequent processing.

## Internal large-capacity battery

The 7.8V, 13800mAh large-capacity built-in battery supports 24-hour continuous work. It's capable of adaptively adjusting charging current dynamically.In static working mode, it supports a 26-hour continuous data collection on a full charge.

| ITEM | | SPECIFICATION | REMARKS |
|---|---|---|---|
| HARDWARE SYSTEM | | ARM Cortex-A7 1.8GHz | |
| OS | | Linux | |
| GNSS | GPS | L1C/A, L2P/L2C, L5 | Marked with *, it means firmware support is required. |
| | GLONASS | L1, L2, L3 | |
| | BDS | B1I, B2I, B3I, B1C, B2a, B2b | |
| | GALILEO | E1, E5a, E5b | |
| | QZSS | L1 C/A, L2C, L5 | |
| | SBAS | L1C/A | |
| | NavIC (IRNSS)* | L5* | |
| | L-band | | |
| | Standard Output | NMEA-0183 | |
| | Correction I/O Protocol | RTCM3.X | |
| | Frequency | 1Hz, 2Hz, 5Hz, 10Hz, 20Hz max | |
| | Reacquisition Time | <1s | |
| | Cold Start Time | <40s | |
| ACCURACY | Single(RMS) | Horizontal: 1.5m Vertical: 3m | |
| | DGPS(RMS) | Horizontal: 0.4m Vertical: 0.8m | |
| | RTK(RMS) | Horizontal: ±(8mm+1ppm)<br>Vertical: ±(15mm+1ppm) | |
| | Timing Accuracy(RMS) | 20ns | |
| | Static Mode Accuracy(RMS) | Horizontal: ±(2.5mm+1ppm)<br>Vertical: ±(5mm+1ppm) | |
| | Data Availability | ≥98% (Available data/Collected data) | |
| | Data Completeness | ≥98% (Collected data/Expected data to be collected) | |
| INTERFACE | Bluetooth | BR+EDR+BLE | |
| | WIFI | 802.11 b/g/n | |
| | Network | Full frequency<br>LTE FDD:B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28<br>LTE TDD: B38/39/40/41<br>WCDMA: B1/2/4/5/6/8/19<br>GSM: B2/3/5/8 | Mini SIM Card |
| | Ethernet Port | Standard RJ45 interface, 10/100M 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<br>Resolution: 240*RGB*240 | Full View |
| | 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<br>Supports continuous data collection for 26 hours on a full charge | TBD |
| | Charging | TYPEC - USB PD 15V/2A 5V/3A<br>LEMO - 12V/2A DC Input supported | With adaptive dynamic current adjustment |
| ENVIRONMENT | Operating Temperature | -20℃~+60℃ | |
| | Storage Temperature | -20℃~+70℃ | |
| | Shock Resistance | GB/T2423 | |
| | Protection Rating | IP68 | |
| PHYSICAL | Material | Aluminum alloy shell | |
| | Dimension | 172mm*148mm*58mm | |
| | Weight | 1920g | |

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

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