

# S650/660

Portable GNSS Receiver



- 220 channels
- GPS+GLONASS+BDS tracking
- Support all kinds of operating system for PDA
- 6800mAh super capacity of battery
- 10cmX10cmX3.5cm dimension, lightweight and compact



South S650/660 gnss receiver, adopts market-proven Pacific Crest Maxwell 6 technology (BD910/BD930 OEM board), 220 channels and unmatched gnss multi-constellation tracking performance, makes effective use of GPS and GLONASS signal for outstanding satellite coverage and high precise positioning.



With the dimension of 10cm×10cm×3.5cm, very lightweight, compact and rugged design, S650 and S660 are the most cost-effective gnss receiver. In this box, equipped with dual mode for Bluetooth V2.1 and Bluetooth V4.0, ensure the unit communicates cable-free with Bluetooth to your PDA terminal. What's more, this unit is able to work as an on-board equipment, greatly improve the working efficiency and the flexibility.



In addition, S650 and S660 enable to use a variety of PDA mobile terminal with all kinds of operating system, such as **Andriod, IOS, WIN7/WIN8**, even more Windows mobile. Cellphone, tablet are the best choice data collectors to work with S650 and S660 to connect to network, improve flexibility for fieldwork. In combination with communication module of mobiles, S650 and S660 get a faster way to obtain correction from CORS network.

| South S650 technical specification |  |
|------------------------------------|--|
| <b>GNSS</b>                        |  |
| Channels                           | 220  |
| GPS                                | L1 C/A with carrier phase smoothing                    |
| GLONASS                            | L1 C/A   |
| BDS                                | B1   |
| Galileo                            | E1   |
| QZSS                               | L1 C/A, L1 SAIF  |
| SBAS                               | L1 C/A   |
| Data Output                        | NMEA-0183, TSIP  |
| I/O Protocol                       | RTCM   |
| Update Rate                        | 1Hz  |
| Reacquisition                      | <1s  |
| Cold Start                         | <30s   |
| <b>Accuracy</b>                    |  |
| Single point positioning           | 2.5m   |
| SBAS                               | Horizontal: 0.5m      Vertical: 0.85m                  |
| DGNSS                              | Horizontal: 0.25m+1ppm      Vertical: 0.50m+1ppm       |
| <b>Communication</b>               |  |
| Data Interface                     | Mini USB2.0  |
| Bluetooth                          | Dual mode, Bluetooth V2.1/ Bluetooth V4.0, support EDR |
| <b>Electrical</b>                  |  |
| Battery                            | 6800mAh, Li-ion battery built in, 3.7V                 |
| Battery life                       | Typically 12 hrs or more                               |
| <b>Environmental</b>               |  |
| Operating temperature              | -20℃~+60℃  |
| Storage temperature                | -30℃~+70℃  |
| Shockproof                         | Withstand drop from 1.5m to concrete                   |
| Waterproof/Dustproof               | Test to IP67 standard                                  |
| <b>Physical</b>                    |  |
| Dimensions(mm)                     | 100(L)×100(W)×35(H)                                    |
| Weight                             | 380 g  |

| South S660 technical specification |  |
|------------------------------------|--|
| <b>GNSS</b>                        |  |
| Channels                           | 220  |
| GPS                                | L1 C/A, L2E, L2C, L5, with carrier phase smoothing     |
| GLONASS                            | L1 C/A, L2 C/A   |
| BDS                                | B1, B2   |
| Galileo                            | E1, E5A, E5B, E5AltBOC                                 |
| QZSS                               | L1 C/A, L1 SAIF, L2C, L5                               |
| SBAS                               | L1 C/A, L5   |
| Data Output                        | NMEA-0183, TSIP  |
| I/O Protocol                       | RTCM, RTCA, CMR  |
| Update Rate                        | 1Hz  |
| Reacquisition                      | <1s  |
| Cold Start                         | <30s   |
| <b>Accuracy</b>                    |  |
| Single point positioning           | 2m   |
| SBAS                               | Horizontal: 0.5m      Vertical: 0.85m                  |
| DGNSS                              | Horizontal: 0.25m+1ppm      Vertical: 0.50m+1ppm       |
| Single Baseline RTK(<30 km)        | Horizontal: 0.008m+1ppm      Vertical: 0.015m+1ppm     |
| <b>Communication</b>               |  |
| Data Interface                     | Mini USB2.0  |
| Bluetooth                          | Dual mode, Bluetooth V2.1/ Bluetooth V4.0, support EDR |
| <b>Electrical</b>                  |  |
| Battery                            | 6800mAh, Li-ion battery built in, 3.7V                 |
| Battery life                       | Typically 11 hrs or more                               |
| <b>Environmental</b>               |  |
| Operating temperature              | -20℃~+60℃  |
| Storage temperature                | -30℃~+70℃  |
| Shockproof                         | Withstand drop from 1.5m to concrete                   |
| Waterproof/Dustproof               | Test to IP67 standard                                  |
| <b>Physical</b>                    |  |
| Dimensions(mm)                     | 100(L)×100(W)×35(H)                                    |
| Weight                             | 400 g  |



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