

AG963



Base Station for AG960 & AG961 Autosteer Systems

Overview

The AG963 Autosteer base station is a high-precision navigation reference product capable of receiving and processing navigation signals from GPS, GLONASS and BeiDou satellites, as well as broadcasting satellite observations via data transceivers. It can be employed within GNSS Autosteer systems, GNSS land leveling systems, geodetic surveying, construction engineering and other fields.

The base station is designed to be easily carried, transported and rapidly deployed. It provides a high-precision differential data broadcasting service for mobile stations within a radius of 5km. For example, in precision agriculture, an AG960 Base Station cooperating with an AG960 Autosteer System provides driver assists on farming machines to improve the precision and efficiency of agricultural operations and reduce the drivers' work effort.



Key Features

Centimeter-level accuracy using multi-frequency GNSS receiver technology in a rugged, all-in one enclosure

Fast RTK fix and reacquisition times

Strong multipath mitigation and interference rejection

Wide input operating voltage range (9V - 36V), high transient protection for any power source

Long range RTK baselines of up to radius 5km with internal radio, further distances can be reached with an external radio

In the Box

- 1 × GNSS receiver
- 1 × Power cable
- 1 × GNSS antenna
- 1 × GNSS antenna RF cable
- 1 × Mount of radio RF antenna
- 1 × Radio RF antenna cable
- 1 × Slender radio transmitter antenna rod
- 1 × Thick radio transmitter antenna rod
- 1 × Antenna bracket assembly
- 1 × Tripod



Technical Specifications

GNSS Receiver

| | |
|--------------------------|--|
| Frequencies: | GPS L1/L2, GLONASS G1/G2, BeiDou B1/B2, Galileo, QZSS |
| RTK Accuracy: | |
| – Horizontal: | 10mm+1ppm |
| – Vertical : | 20mm+2ppm |
| Correction I/O Protocol: | RTCM v2.3, RTCM v3.2, CMR, CMR+ |
| Dimensions: | 228×171×57mm |
| Weight: | 1.4Kg |

GNSS Antenna

| | |
|---------------------|---|
| Frequencies: | GPS L1/L2, GLONASS G1/G2 BeiDou B1/B2/B3 |
| Polarization: | RHCP |
| Axial Ratio: | ≤3dB |
| Azimuth Coverage: | 360° |
| Output VSWR: | ≤2.0 |
| Peak Gain: | 5.5dBi |
| Phase Center Error: | ±2mm |
| Dimensions: | Φ152×62.2mm |
| Weight: | 374g |

Radio

| | |
|------------------------------------|-------------|
| Radio channel number: | 15 |
| Frequency: | 452-467 MHz |
| Radio transmitting power: | 2W |
| Operation range (Radio): | ≤5 km |
| Radio transmitting antenna length: | 1m |

Physical

| | |
|------------------------|--------------------|
| Operation Temperature: | -40°C ~ +70°C |
| Power Consumption: | ≤5 W (12V battery) |
| Equipment Weight: | ≤9 kg |
| Dust & Water Proof: | IP67 |

