

AgGPS RTK BASE 900 AND 450 RECEIVERS

The Trimble® AgGPS® RTK Base 900 and 450 receivers are easy to use RTK base stations for agricultural applications— with many time saving features the AgGPS RTK base receiver can be used as a mobile base or as part of a base station network. It uniquely combines a GPS receiver, RTK radio, and 10 hour battery into one small unit.

SYSTEM FEATURES

450 or 900 MHz transmit capability
 24 channel L1/L2 GPS receiver
 Operating range from -40° F to +149° F
 (-40° C to +65° C)

Easy to use menu system for configuration and status checking

9 V to 30 V DC input power with over-voltage protection

Configuring the network receiver and radio network settings can be done using the display and keypad on the receiver so no office set up or field laptop required

Reliable 1 inch year to year repeatability for all your row crop activities

GPS receiver, radio, and battery are contained a robust unit weighing only 3.64 lbs (1.65 kg) making it a breeze to set up quickly anywhere on your farm

Long-life integrated battery provides more than 10 hour operation as a base station, no need to lug around a car battery

Automatically sets up on a previously set point with Autobase Technology™ function, makes for a quick set up time on your preprogrammed locations



SPECIFICATIONS

GENERAL CHARACTERISTICS	SPECIFICATIONS
Receiver type	Modular GPS receiver
GPS antenna type	Zephyr™ geodetic
Dimensions (L x W x H)	9.4 in (24 cm) x 4.7 in (12 cm) x 1.9 in (5 cm) including connectors
GPS receiver weight	3.64 lbs (1.65 kg) receiver including internal battery and radio
Keyboard and display	Displays 16 characters by 2 rows On/Off Key for one button start up with Autobase Escape and Enter key for menu navigation 4 arrow keys (up, down, left, right) for option scrolls and data entry
Temperature: operating storage	-40° F to +149° F (-40° C to +65° C) -40° F to +176° F (-40° C to +80° C)
Humidity	100% condensing
Waterproof	Submersible to depth of 3.28 ft (1 m)
Shock and vibration Shock—non-operating	Tested and meets the following environmental standards: Designed to survive a 6.6 ft (2 m) pole drop onto concrete MIL-STD-810F, Fig.514.5C-17
Shock—operating Vibration	To 40 G, 10 m/sec, saw-tooth MIL-STD-810F, Fig.514.5C-17
Measurements	Advanced Trimble Maxwell™ 5 custom GPS chip High precision multiple correlator for L1 and L2 pseudo-range measurements Unfiltered, unsmoothed pseudo-range measurements data for low noise, low multi-path error, low time domain correlation and high dynamic response Very low noise L1 and L2 carrier phase measurements with <1 mm precision in a 1 hz bandwidth L1 and L2 Signal-to-Noise ratios measured in dB-hz Proven Trimble low elevation tracking technology 24 Channels L1 C/A code L1/L2 full cycle carrier WAAS/EGNOS/MSAS
Code differential GPS positioning Horizontal accuracy Vertical accuracy	±(0.25 m + 1 ppm) RMS, ±(9.84 in + 1 ppm) RMS ±(0.5 m + 1 ppm) RMS, ±(19.68 in + 1 ppm) RMS

ELECTRICAL CHARACTERISTICS	SPECIFICATIONS
Internal power	Integrated internal battery 7.4 V, 7800 mA-hr Li-Ion Internal battery operates as a UPS in the event of external power source outage Internal battery will charge from external power source when input voltage is >15 V Integrated charging circuitry
External power	9 to 30 VDC external power input with over-voltage protection
Power consumption	8.5 W in RTK base mode (includes the transmit radio power requirements)
Certification	Class B Part 15, 22, 24 FCC Certification Canadian FCC CE Mark approval C-tick approval UN ST/SG/AC10.11/Rev. 3, amend. 1 (Li-Ion battery) UN ST/SG/AC. 10/27/Add. 2 (Li-Ion battery) UN T1 – T8 (Li-Ion battery) 49 CFR Sections 100-185 (Li-Ion battery) WEEE

COMMUNICATIONS CHARACTERISTICS	SPECIFICATIONS
Communications Port 1 (7-pin 05 Lemo) Port 2 (DSub 26-pin)	3-wire RS-232 CAN Full RS-232 (via multi-port adapter) 3-wire RS-232 USB (On The Go) (via multi-port adapter)
Integrated radios Frequency approvals (900 MHz) 900 MHz transmitter radio power output 450 MHz transmitter radio power output Channel spacing (450 MHz)	Fully integrated, fully sealed internal 900 MHz Transmit Fully integrated, fully sealed internal 450 MHz Transmit USA, Canada, Australia, New Zealand 1.0 w (30 dBm) 0.5 w/2.0 w (a license is required to use in Europe) 12.5 or 25 KHz spacing available