The Trimble® SPS882 GNSS Smart Antenna offers unmatched flexibility for all your construction measurement needs. It is ideal for use on small and large job sites, as a pole-mounted rover system or as a temporary base station for other GNSS operations including machine control.

With Trimble SCS900 Site Controller Software, the SPS882 can help you:

- Determine cut/fill anywhere on the jobsite
- Stake out site or road features, utilities, daylight lines and side slopes
- Carry out site measurements for progress and material stockpile volume calculations
- Carry out as-built measurements, grade checks and laid material thickness checks

Using the advanced Trimble Maxwell™ 6 chip, the SPS882 GNSS Smart Antenna can "see" more GNSS constellations, satellites, and signals than traditional GPS, so you can expect greater accuracy in more challenging conditions such as under tree canopy and in urban areas. That also means more uptime using the system and more productivity for your job crews.

Fast to Set-up and Use
Rover set up is fast and easy—just switch on the receiver, start up the controller and you’re ready to go. Because the receiver, antenna, radio, radio antenna and battery are integrated into one housing, you don’t have to deal with cables and multiple components. And with Trimble AutoBase™ functionality you can also repeat daily set up of the SPS882 base station without the need for a controller. Simple to transport and fast to setup, the SPS882 GNSS Smart Antenna keeps your crews working, not wasting time with GNSS maintenance.

The fully upgradable SPS882 receiver can be configured in a variety of ways to suit any application, for example:

- As a portable base station only
- As a rover only with Precision or Location RTK accuracy
- As a flexible base or rover with Precision RTK accuracy

All options are available at the time of sale or as an upgrade.
**TRIMBLE SPS882 GNSS SMART ANTENNA**

**GENERAL**
Keyboard and display .......... LED indicators for satellite tracking, radio link reception and power monitoring

On/Off key for one-button startup

Dimensions (W x D) .............. 19 cm (7.5 in) x 11.2 cm (4.4 in)

Weight .............. 1.35 kg (2.97 lb) receiver only including radio and battery

Complete system (rover including controller and pole) ......... 3.7 kg

**ENVIRONMENTAL**

Operating °C to °C (-10 °C to +140 °C)

Storage °C to °C (-40 °C to +85 °C (-40 °F to +167 °F)

Humidity .................. 100%, condensing

Waterproof ............... IP67 for submersion to depth of 1 m (3.3 ft), dustproof

Pole drop .............. Designed to survive a 2 m (6.6 ft) pole drop onto concrete

**POWER**

Drive consumption ........ 3.2 W, in RTK mode with internal radio

External ............................................. 11 V DC to 28 V DC external power input

Internal ............................................. Lithium-ion battery in internal battery compartment

Lithium-ion battery in internal battery compartment

Lemo (Serial) ............... 7-pin 0S Lemo, Serial 1, 3-wire RS-232

Modem 1 (Serial) ............... D-sub, Serial 2, Full 9-wire RS232

Bluetooth wireless technology .... Fully-integrated, fully-sealed 2.4 GHz Bluetooth module

Integrated radios (optional) .......... Fully-integrated, fully-sealed internal 450 MHz (UHF) Tx/Rx;

Internal 900 MHz Tx/Rx

External GSM/GPRS, cell phone support ... Supported via the SCS900 and SPS controller

Receiver position update rate ........ 1 Hz, 2 Hz, 5 Hz, 10 Hz, and 20 Hz positioning

Correction data input/output . CMR ™, CMR+, CMRx, RTCM3, RTCM 2.x (with Rover/Base upgrade)

Data outputs .................. NMEA, GSOF

**MEASUREMENTS**

- 220-channel L1C/A/L1/L2/L2C. Upgradable to L5 and GLONASS L1/L2C/A, L1/L2P Full Cycle Carrier

- Trimble EVEREST™ multipath signal rejection

- 4-channel SBAS L1 C/A, L5 (WAAS/EGNOS/MSAS)

**CODE DIFFERENTIAL GPS POSITIONING**

Horizontal accuracy ........ 0.25 m + 1 ppm RMS (0.8 ft + 1 ppm RMS)

Vertical accuracy ........ 0.50 m + 1 ppm RMS (1.6 ft + 1 ppm RMS)

**REAL-TIME KINEMATIC (RTK) POSITIONING**

Horizontal accuracy ........ 8 mm + 1 ppm RMS (0.026 ft + 1 ppm RMS)

Vertical accuracy ........ 15 mm + 1 ppm RMS (0.05 ft + 1 ppm RMS)

**INITIALIZATION TIME**

RTK operation with a single base station .............. 1 second

Regular RTK operation within RTK network .......... Minimum 1.5 seconds

+ 0.5 seconds per 10 km

Initialization reliability .................................. >99.9%

**POWER**

Internal ............................................. Rechargeable, removable 7.4 V, 2.4 Ah Lithium-ion battery in internal battery compartment

External .............................................External power input with over-voltage protection

11 V DC to 28 V DC external power input

Power consumption ........ 3.2 W, in RTK mode with internal radio

**OPERATION TIME ON INTERNAL BATTERY**

Rover .............. 5 hours; varies with temperature

Base station with internal radio .... 3.7 hours; varies with temperature

**REGULATORY APPROVALS**

- FCC certification Class B Part 15, 22, 24

- Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada

- Canadian RSS-310, RSS-210, and RSS-119

- Cet appareil est conforme à la norme CNR-310, CNR-210, et CNR-119

- CE mark compliance

- C-tick mark compliance

- RoHS compliant

- FCC compliant

**COMMUNICATIONS**

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