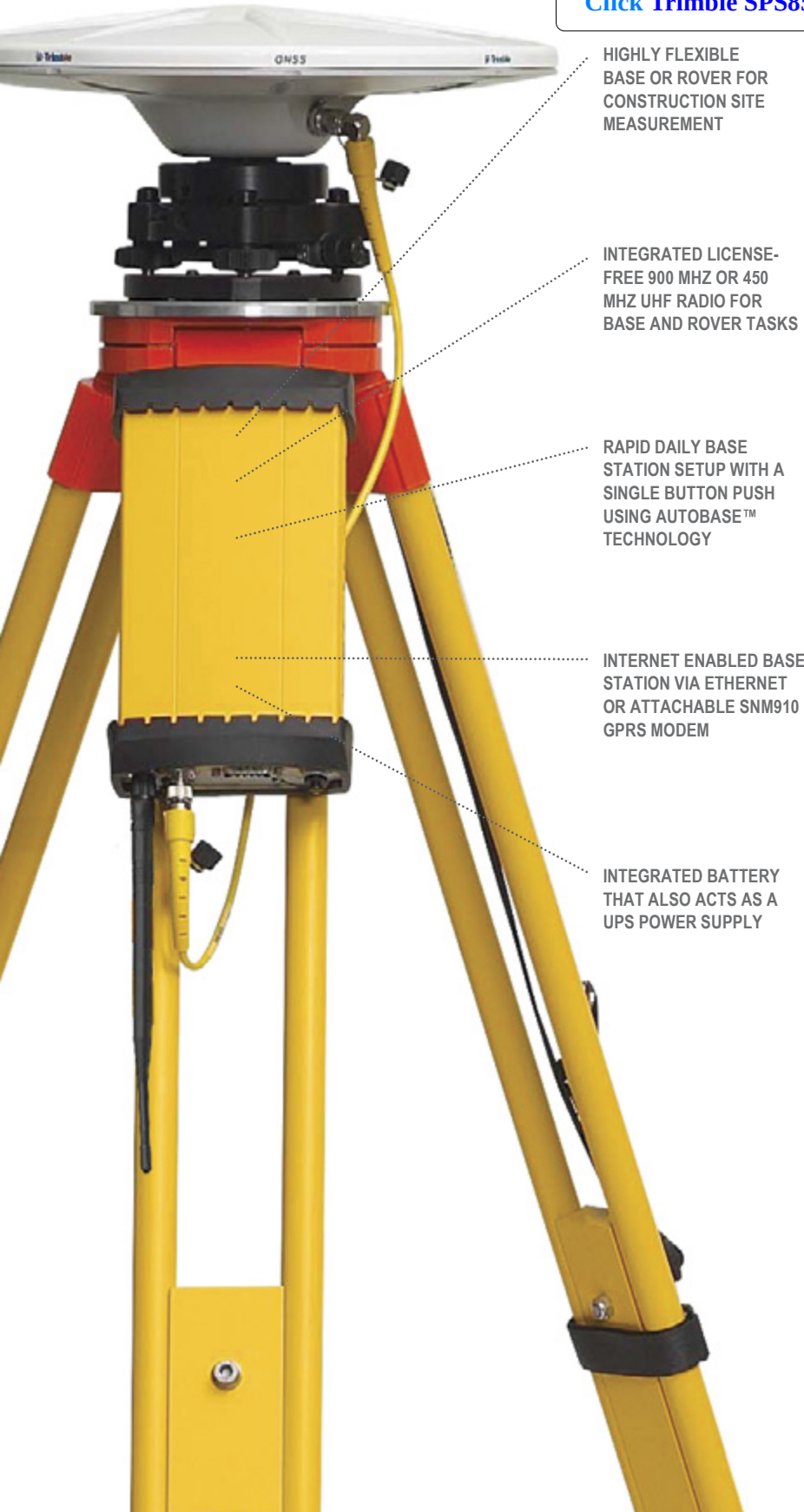


TRIMBLE SPS852 GNSS MODULAR RECEIVER

Provided by Xpert Survey Equipment
[Click Trimble SPS852 for Product Info and Updated Pricing](#)



HIGHLY FLEXIBLE
 BASE OR ROVER FOR
 CONSTRUCTION SITE
 MEASUREMENT

INTEGRATED LICENSE-
 FREE 900 MHZ OR 450
 MHZ UHF RADIO FOR
 BASE AND ROVER TASKS

RAPID DAILY BASE
 STATION SETUP WITH A
 SINGLE BUTTON PUSH
 USING AUTOBASE™
 TECHNOLOGY

INTERNET ENABLED BASE
 STATION VIA ETHERNET
 OR ATTACHABLE SNM910
 GPRS MODEM

INTEGRATED BATTERY
 THAT ALSO ACTS AS A
 UPS POWER SUPPLY

FLEXIBLE RECEIVER FOR JOBSITE MEASUREMENT

Whether you need a reliable GNSS base station or a rugged rover, the Trimble® SPS852 GNSS Modular Receiver gives you the flexibility to do all of your construction site measurements. As a permanent or semi-permanent base station, it provides GNSS corrections for site measurements and machine control. As a rover, it can move easily from a site supervisor truck to a pole mount for grade checking, site measurement and stakeout.

The versatile SPS852 receiver is available in a range of options to suit your jobsite or marine construction performance requirements. Simply purchase the receiver that you need today, and upgrade as your needs change.

Secure and Easy to Use

The Trimble SPS852 is comprised of an integrated GNSS receiver and radio plus a choice of external antenna. The receiver can be placed in a secure environment such as the job trailer or boat cabin where it is protected from theft and weather. The less expensive antenna can be placed in a location with clear visibility to the sky and maximum radio coverage.

You don't have to be a GNSS expert to use the SPS852. Integrated 900 MHz license-free radio and interface with Trimble SCS900 Site Controller Software make the SPS852 easy to use, fast to setup and more productive on the job. Trimble Autobase™ technology means anyone on the jobsite can perform daily base station set up with one button push.

For more advanced troubleshooting, the receiver's web interface allows your GNSS manager to remotely monitor base station performance, availability, and configuration. No need for time-consuming and costly visits to the base station to set up each day or diagnose issues that may arise.

The fully upgradable SPS852 GNSS Modular Receiver can be configured in a variety of ways, for example:

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

The SPS852 can be combined with the Trimble SPS552H Heading Add-on Receiver, for applications on cranes, construction vessels, and dredges where the position and orientation are important in real-time.



The Construction Technology Standard

www.trimble.com

TRIMBLE SPS852 GNSS MODULAR RECEIVER

GENERAL

Keyboard and display . . . Vacuum Fluorescent display 16 characters by 2 rows.
Invertable. On/Off key for one-button startup
Dimensions (L x W x D) 24 cm x 12 cm x 5 cm (9.4 in x 4.7 in x 1.9 in)
Weight 1.65 kg (3.64 lb) receiver with internal battery and radio
1.55 kg (3.42 lb) receiver with internal battery and no radio

ANTENNA OPTIONS

GA530 L1/L2/L2C GPS, SBAS, and OmniSTAR
GA810 GPS, Glonass, OmniSTAR, SBAS, Galileo (optimized for OmniSTAR)
Zephyr™ 2 L1/L2/L2C/L5 GPS, Glonass, OmniSTAR, SBAS, Galileo
Zephyr Geodetic™ 2 L1/L2/L2C/L5 GPS, Glonass, OmniSTAR, SBAS, Galileo
Zephyr 2 Rugged L1/L2/L2C/L5 GPS, Glonass, OmniSTAR, SBAS, Galileo

ENVIRONMENTAL

Operating 1 -40 °C to +65 °C (-40 °F to +149 °F)
Storage -40 °C to +80 °C (-40 °F to +176 °F)
Humidity MIL-STD 810F, Method 507.4
Waterproof IP67 for submersion to depth of 1 m (3.3 ft), dustproof
Pole drop Designed to survive a 1 m (3.3 ft) pole drop onto a hard surface

MEASUREMENTS

- 220-channel L1C/A, L1/L2/L2C. Upgradable to L5 and GLONASS L1/L2C/A, L1/L2P Full Cycle Carrier
- Galileo²
- Trimble EVEREST™ multipath signal rejection
- 4-channel SBAS (WAAS/EGNOS/MSAS)

CODE DIFFERENTIAL GPS POSITIONING ³

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 UP TO 30 KM) POSITIONING ³

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

Initialization reliability ⁴ >99.9%

POWER

Internal Integrated internal battery 7.2 V, 7800 mA-hr, Lithium-ion
External Power input on 7-pin 0-shell Lemo connector is optimized for lead acid batteries with a cut-off threshold of 11.5 V
Power input on the 26-pin D-sub connector is optimized for Trimble lithium-ion battery input with a cut-off threshold of 10.5 V
Power consumption 6.0 W in rover mode with internal receive radio
8.0 W in base mode with internal transmit radio

OPERATION TIME ON INTERNAL BATTERY

Rover 13 hours; varies with temperature
Base station
450 MHz systems Approximately 11 hours; varies with temperature ⁵
900 MHz systems Approximately 9 hours; varies with temperature

REGULATORY APPROVALS

- FCC: Part 15 Subpart B (Class B Device) and Subpart C, Part 90
- 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 du Canada.
- R&TTE Directive: EN 301 489-1/-5/-17, EN 300 440, EN 300 328, EN 300 113, EN 60950, EN 50371
- ACMA: AS/NZS 4295 approval
- CE mark compliance
- C-tick mark compliance
- UN ST/SG/AC.10.11/Rev. 3, Amend. 1 (Lithium-ion Battery)
- UN ST/SG/AC. 10/27/Add. 2 (Lithium-ion Battery)
- RoHS compliant
- WEEE compliant

COMMUNICATIONS

Lemo (Serial) 7-pin 0S Lemo, Serial 1, 3-wire RS-232
Modem 1 (Serial) 26-pin D-sub, Serial 2, Full 9-wire RS232, using adaptor cable
Modem 2 (Serial) 26-pin D-sub, Serial 3, 3 wire RS-232, using adaptor cable
1PPS (1 Pulse-per-second) Available on Marine versions
Ethernet Through a multi-port adaptor
Bluetooth wireless technology Fully-integrated, fully-sealed 2.4 GHz Bluetooth module ⁶
Integrated radios (optional) Fully-integrated, fully-sealed internal 450 MHz (UHF) Tx/Rx; Internal 900 MHz Tx/Rx
External GSM/GPRS, cell phone support For Internet-based correction streams
Receiver position update rate 1 Hz, 2 Hz, 5 Hz, 10 Hz, and 20 Hz positioning
Correction data input/output CMR™, CMR+™, CMRx™, RTCM v 2.x & 3.x
Data outputs NMEA, GSOFF, 1PPS Time Tags (Marine version)

1 Receiver will operate normally to -40 °C. Internal batteries are rated to -20 °C.
2 Developed under a license of the European Union and the European Space Agency.
3 Accuracy and reliability may be subject to anomalies such as multipath, obstructions, satellite geometry, and atmospheric conditions. Always follow recommended practices.
4 May be affected by atmospheric conditions, signal multipath, and satellite geometry. Initialization reliability is continuously monitored to ensure highest quality.
5 If your receiver has the 2.0 W upgrade, you will experience reduced battery performance compared to the 0.5W solution.
6 Bluetooth type approvals are country specific. For more information, contact your local Trimble distributor or representative.

Specifications subject to change without notice.

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