

SSC-M8 GPS RECEIVER



HIGH-PERFORMANCE MULTI-GNSS RECEIVER FOR SEISMIC, MAPPING, MACHINE CONTROL, AND MONITORING APPLICATIONS

The SSC-M8 GPS Receiver is a compact, high-performance multi-GNSS receiver designed for seismic operations, mapping, machine control, and asset monitoring. Supporting GPS, GLONASS, Galileo, and BeiDou constellations, the SSC-M8 delivers reliable positioning, fast satellite acquisition, and robust performance in challenging environments. With internal WAAS/SBAS corrections and support for external differential corrections via the RS-232 serial port, the SSC-M8 is capable of sub-meter positioning accuracy.



KEY FEATURES

- Multi-GNSS Support:**
GPS • GLONASS • Galileo • BeiDou
- Typical autonomous accuracy:**
2.5 m CEP
- Internal WAAS/SBAS corrections** for improved accuracy
- External differential corrections (RTCM)** input via RS-232 for enhanced accuracy
- Navigation sensitivity:** -167 dBm
- WAAS, EGNOS, MSAS, and SBAS support**
- Fast satellite acquisition and tracking**
- Advanced jamming and spoofing detection**
- Operating temperature:** -40°C to +85°C
- Low power consumption**
- Single RS-232 serial port for position output and differential corrections input**

BUILT FOR THE FIELD

Small, rugged, and reliable. The SSC-M8 is built to perform in demanding field environments.



IN THE BOX

- SSC-M8 GPS Receiver
- RS-232 Serial Cable
- Mounting Hardware
- Quick Start Guide

IDEAL FOR



HOW IT WORKS



The SSC-M8 uses internal WAAS/SBAS corrections for improved accuracy. For higher accuracy, external RTCM corrections can be supplied through the RS-232 port.

SPECIFICATIONS (BASED ON NEO-M8 MODULE)

FEATURE	DETAILS
Supported Constellations	GPS, GLONASS, Galileo, BeiDou
Concurrent GNSS	Up to 3 systems simultaneously
Position Accuracy (Autonomous)	Typical 2.5 m CEP
Position Accuracy (SBAS)	Sub-meter capable
Position Accuracy (RTCM)	Enhanced accuracy depending on correction source
Navigation Sensitivity	-167 dBm
SBAS Support	WAAS, EGNOS, MSAS, SBAS
Acquisition Time (Cold Start)	~27 s
Acquisition Time (Hot Start)	~1 s
Update Rate	1 Hz
Position Output	NMEA 0183
Differential Input	RTCM via RS-232
Interface	RS-232 Serial
Connector Options	9-Pin D-Sub (DB9) Male or 6-Pin Circular MS Male
Operating Voltage	2.7 - 3.6 VDC
Operating Temperature	-40°C to +85°C
Power Consumption	22 mA @ 3.0 V typical
Dimensions	122 mm x 80 mm x 24 mm
Weight	~120 g

* Accuracy and performance depend on environment, satellite visibility, and correction service.

RS-232 SERIAL INTERFACE

The SSC-M8 features a single RS-232 serial port.

OUTPUT (FROM SSC-M8)

- NMEA 0183 Position Data
- GPS Time Information
- Satellite Status Data

INPUT (TO SSC-M8)

- RTCM Differential Corrections
- Configuration Commands

Standard RS-232 levels (3.3 V logic). Cable and pinout information available in the user manual.

CONNECTOR OPTIONS



WHY CHOOSE SSC-M8?

- SUB-METER CAPABLE**
Sub-meter accuracy with WAAS/SBAS or external corrections.
- MULTI-GNSS RECEPTION**
GPS, GLONASS, Galileo, and BeiDou up to 3 systems.
- RELIABLE SATELLITE TRACKING**
High sensitivity and fast acquisition even in challenging conditions.
- LOW POWER CONSUMPTION**
Efficient design for extended field operation.
- RUGGED DESIGN**
Built to perform in harsh environments -40°C to +85°C.
- EASY INTEGRATION**
Standard RS-232 (DB9 or 6-pin MS) interface for simple integration with a wide range of systems.
- IDEAL FOR SEISMIC**
Designed for seismic, mapping, machine control, and more.