

SveeSix Series

Versatile GPS Receivers

Performance Specifications

General:	L1 frequency, CA code (SPS), 6 channels, continuous tracking receiver, tracks 8 satellites
Update rate:	TSIP at 2Hz, NMEA & TAIP at 1Hz
Accuracy:	Position: 25 m SEP without SA Velocity: 0.1 m/sec without SA Time: 1 micro-second (nominal)
DGPS accuracy:	Position: 2 to 5 m (2 sigma) Velocity: 0.1 m/sec Time: 1 micro-second (nominal)
Acquisition (typical):	Cold start: 2 to 5 minutes Warm start: 50 seconds Hot start: 30 seconds
Dynamics:	Velocity: 500 m/sec maximum Acceleration: 4g (39.2 m/sec ²) Jerk: 20 m/sec ³

Environmental Specifications

Operating temp:	-10°C to +60°C (standard board) -40°C to +85°C (optional board)
Storage temp:	-55°C to +100°C
Vibration:	0.008g ² /Hz 5Hz to 20Hz .05g ² /Hz 20 Hz to 100Hz -3db/octave 100Hz to 900Hz
	Note: Specifications comply with SAE J 1211 requirements
Operating humidity:	5% to 95% R.H. non-condensing at +60°C
Altitude:	-400 m to +18,000 m

Technical Specifications

Prime power:	9 to 32 VDC input (standard) 1.85 Watts nominal (w/o GPS antenna) 2.0 Watts nominal (with GPS antenna) Add 200 m W for RS-422 electrical interface Reverse polarity protection Mechanical connection 3-pin coaxial
Output (1-pulse-per-second):	± 1 micro-second, open collector
Back-up power:	+3 to 12V (1 micro-amp @ +3V)
Serial port:	RS-232 or RS-422
Protocol options:	TSIP at 9600 baud, 8-odd-1 NMEA-0183 V2.0 at 4800 baud, 8-none-1 TAIP at 4800 baud, 8-none-1
NMEA messages:	Standard: GGA and VTG Optional: Any combination of GGA, GLL, VTG, ZDA, GSA, GSV, RMO

Physical Characteristics

Dimensions:	
SveeSix: (board)	3.6"D x 4.06"W x 0.8"H (92 mm x 103 mm x 20 mm) (over connectors*)
SveeSix Plus: (metal enclosure)	4.03"D x 4.97"W x 1.1"H (102 mm x 127 mm x 28 mm) (excluding mounting flange)
Mounting flange:	4.03"D x 6.81"W x 0.062"H (102 mm x 173 mm x 2 mm)
Antenna:	2.36" (60 mm) dia x 0.76" (19.3 mm) Overall external dimensions dependent upon form and mechanical mounting of radome assembly
Weight:	
Board:	0.8 lbs. (80 g) (with two DB-9 connectors) (8.4 cm x 17.3 cm x 3.3 cm)
SveeSix Plus:	0.57 lbs. (260 g) (including mounting flange)

* Board layout and design is configurable to meet specific customer requirements and applications. Options and formats prescribed will determine final board size and layout. Board sizes may vary from minimum of 2" x 2.5" to a maximum of 8" x 11".

Common Configurations

SveeSix standard temperature RS-232:

23190-61	TSIP
23190-62	NMEA
23190-63	TAIP

SveeSix Differential-ready extended temperatures RS-232:

23192-61	TSIP
23192-62	NMEA
23192-63	TAIP

SveeSix Plus standard temperature; RS-232, metal enclosure:

23196-61	TSIP
23196-62	NMEA
23196-63	TAIP

GPS antenna:

21423-00	Magnetic mount with 5-meter cable
21423-20	Non-magnetic mount with 5-meter cable
18334-10	Bulkhead mount without cable
23726-00	Rooftop antenna kit
21425	6-meter cable for bulkhead
21589-00	SveeSix Plus Starter Kit

Includes SveeSix Plus with DGPS, magnetic mount antenna, TSIP, NMEA and TAIP firmware, software tool kits for TSIP and TAIP, interface cables, and manual.

Note: All GPS receivers are subject to degradation of position and velocity accuracies under Department of Defense-imposed Selective Availability (SA). Position may be degraded up to 100 meters 2D RMS.

Note: Additional configurations are available. Consult your Trimble representative for details.

Specifications subject to change without notice.