# **SWEGEO SS100S**

#### SINGLE ANTENNA GNSS RECEIVER SENSOR

### **KEY FEATURES**

Equipped with multi-constellation GNSS support, it ensures reliable and robust satellite signal reception from GPS, GLONASS, Galileo, and BeiDou systems. Its rugged design and IP67-rated enclosure make it suitable for various demanding environments. The receiver's high update rate, low latency, and integrated communication interfaces allow for seamless integration into your existing systems. Experience the power and precision of our RTK receiver's cutting-edge technical features today.











#### MULTI-CONSTELLATION GNSS SUPPORT

Ensures reliable and robust signal reception from GPS, GLONASS, Galileo, and BeiDou systems, providing comprehensive coverage and improved accuracy.

#### INTEGRATED COMMUNICATION INTERFACES

Seamlessly integrates into existing systems with various communication options, enhancing connectivity and ease of use.

#### **RUGGED DESIGN WITH IP67 RATING**

Features a durable and weather-resistant enclosure, making it suitable for harsh and demanding environments.

#### HIGH UPDATE RATE AND LOW LATENCY

Delivers real-time data with minimal delay, ensuring timely and accurate positioning information for critical applications.

# **SWEGEO**

# **SWEGEO SS100S**

## **SINGLE ANTENNA GNSS RECEIVER SENSOR**

GENERAL	
Channels	
Primary RF	GPS L1 C/A, L1C, L2C, L2P, L5
	GLONASS2 L1 C/A, L2 C/A, L2P, L3, L5
	Galileo3 E1, E5 AltBOC, E5a, E5b, E6
	BeiDou B1I, B1C, B2I, B2a, B2b, B3I
	QZSS L1 C/A, L1C, L1S, L2C, L5, L6
	NavIC (IRNSS) L5
	SBAS L1, L5
	L-Band up to 5 channels
	Horizontal position accuracy (RMS)
Accuracy	Single point L1 1.5 m
	Single point L1/L2 1.2 m
	SBAS4 60 cm
	DGPS 40 cm
	TerraStar-L5 40 cm
	TerraStar-C PRO5 2.5 cm
	TerraStar-X5 2 cm
	RTK 1 cm + 1 ppm
Data Update Rate	Maximum data rate
	Measurements up to 100 Hz
	Position up to 100 Hz
Initialization /	Time to first fix7
Time to first fix	Cold start < 34 s (typ)
Time to first fix	Hot start < 20 s (typ
Signal Reacquisition	L1 < 0.5 s (typ)
	L2 < 1.0 s (typ)
Velocity Limit	600 m/s
Velocity Accuracy	< 0.03 m/s RMS
Time Accuracy	< 5 ns RMS

PHYSICAL AND ELECTRICAL	
Dimensions	147 x 125 x 55 mm
Weight	500 g
Power Consumption	3.25 W
Input voltage	+9 to +36 VDC
2 Antenna LNA power output	Output voltage 5 VDC ±5%
	Maximum current 200 Ma
Connectors	RF 1*TNC
	USB M12-USB TYPE A Cable
	Serial M12-2*DB9Y Cable
	Power M12-3 Wire Cable
Status Led	Position Valid
	Power
	Serial Rx/Tx Stream

ENVIROMENTAL	
Operating Temperature	-40°C to +75°C
Storage Temperature	-40°C to +85°C
Humidity	95% Non-condensing
Ingress Rating	IP67
Vibration	Random MIL-STD-810H,
	Method 514.8 (Cat 24, 20 g RMS)
	Sinusoidal IEC 60068-2-6
Acceleration	MIL-STD-810H,
	Method 513.8, Procedure II (16 g)
Bump	IEC 60068-2-27 (25 g)
Shock	MIL-STD-810H,
	Method 516.8, Procedure 1
	40 g 11 ms terminal sawtooth

