

KEY FEATURES

The Swegeo HS90 is a multi-constellation and multi-frequency GNSS spiral antenna with multi-arm - multi-feed point technology that supports GPS, GLONASS, GALILEO, BEIDOU, QZSS, IRNSS, SBAS and L-Band.



EXCEPTIONAL OUT OF BAND REJECTION PERFORMANCE

It features a built-in multi-stage filter and low-noise amplifier, providing strong anti-interference and out-of-band suppression for reliable operation in harsh electromagnetic environments, meeting high-precision measurement needs.

HIGH GAIN RECEPTION & RELIABLE LOW-NOISE AMPLIFIER FOR OPTIMAL SATELLITE TRACKING

It fits into any application that requires high performance in high-precision positioning, particularly in UAV and other industrial applications like robotics.

ENHANCED PERFORMANCE AND PRECISION

Multi-arm spiral technology ensures high performance on right-hand circular polarization and phase center stability. It further lowers the measurement errors.

OPTIMIZED RECEPTION

The overall design provides a high gain on low-elevation satellite signal reception so that a higher number of satellites are available for position calculation.

VERSATILE AND DURABLE

It is a low profile helical antenna that is small in size, lightweight. It features three screw mount for stable and reliable mounting in demanding environments.

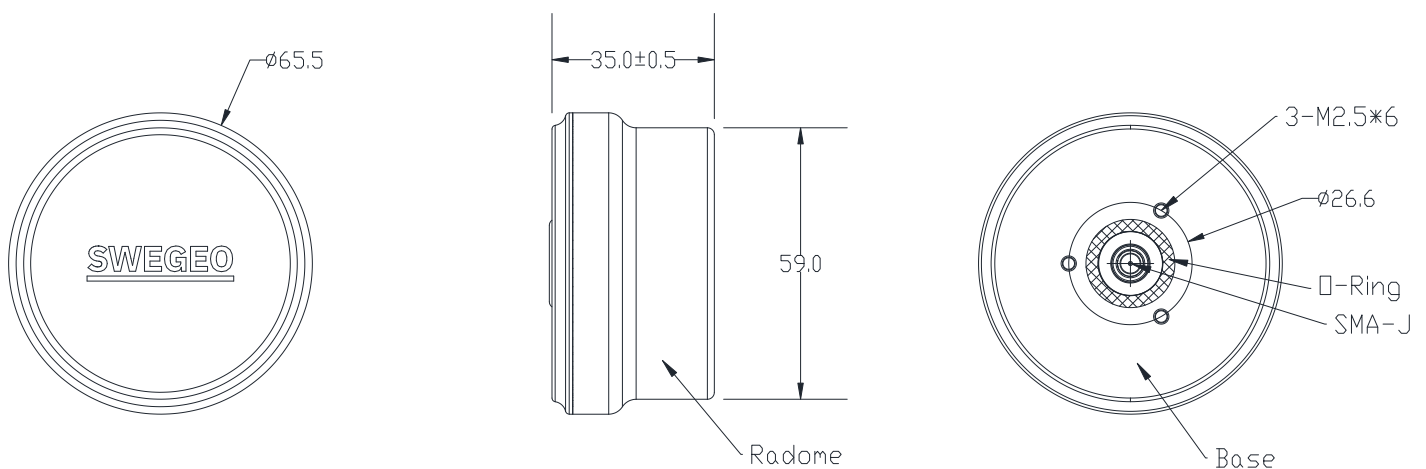
GENERAL	
Architecture	Quadrifilar Helix
Signal Supported	GPS: L1/L2/L5
	GLONASS: G1/G2/G3;
	BEIDOU B1/B2/B3
	GALILEO E1/E5a/E5b/E6
	QZSS L1/L2/L5
	IRNSS L1/L2/L5
	SBAS L1/L2/L5
	L-Band
Nominal Impedance	50 Ω
Polarization	RHCP
Axial Ratio @zenith	≤ 1.5 dB
Gain @zenith	≥ 2.5 dB

MECHANICAL	
Dimensions	$\Phi 65.5$ mm*35.0 mm
Connector	SMA-J
Weight	40 gram
Radome	EXL93303
Attachment	screws on base
Vibration	3 axis,sweep=15min,10 to 200Hz sweep:3G
Shock	Vertical axis:50G,other axes: 30G

LNA	
Frequency Range	1164MHz~1300MHz
	1540MHz~1606MHz
LNA Gain	32 $\pm$ 3.0dB (Typ. @25°C,@2.7VDC~16VDC)
Noise Figure	≤ 2.5 dB@25°C
Output VSWR	$\leq 1.8:1$ typ. 2.0:1max
Operation Voltage	2.5~16.0VDC(Recommend 2.7VDC~16VDC)
Operation Current	≤ 45 mA
Output of Band Rejection	≤ 1050 MHz: >65dB
	1400MHz: >60dB
	≥ 1690 MHz: >65dB

ENVIROMENTAL	
Operating Temperature	-40°C to+85°C
Storage Temperature	-45°C to+85°C
Humidity	95% Non-condensing
Ingress Rating	IP67

MECHANICAL DRAWING (MM)



TOP VIEW

SIDE VIEW

BOTTOM VIEW