

KEY FEATURES

Swegeo AA30 is a multi-constellation and multi-frequency Airborne GNSS antenna that supports GPS, GLONASS, GALILEO, BEIDOU, QZSS, IRNSS, SBAS and L-Band.



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

- It is widely used in high-precision navigation and positioning applications in high dynamic environments such as aerospace, UAV, precision agriculture, ADAS, Autonomous Driving where aerodynamics play an crucial role while accuracy and reliability are not sacrificed. Furthermore AA30 is the indoor antenna of TT225 GNSS Re-radiating system.

ENHANCED PERFORMANCE AND PRECISION

- Double layer multi-feed point 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.

IMPROVED SIGNAL QUALITY

- Pre-filtering on the low noise amplifier effectively suppresses out-of-band interference signals and improves the reliability of the system.

VERSATILE AND DURABLE

- The enclosure is rated IP67 which ensures a reliable performance in any harsh environmental conditions.

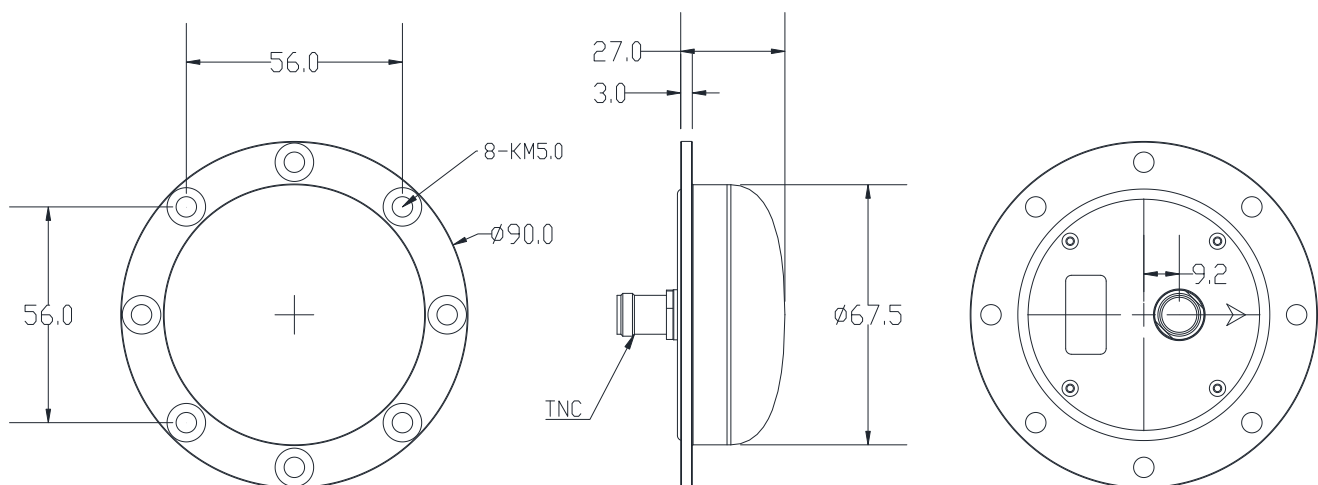
GENERAL	
Architecture	Dual Feed, Dual Stacked Patch
Signal Supported	GPS L1/L2/L5
	GLONASS: G1/G2/G3;
	BEIDOU B1/B2/B3
	GALILEO E1/E5a/E5b/E6
	QZSS L1/L2/L5
	IRNSS L1/L2/L5
	SBAS L1/L2/L5
	L-Band
Nominal Impedance	50 Ω
Polarization	RHCP
Axial Ratio @zenith	≤ 1.5 dB
Gain @zenith	≥ 2.5 dB _i @Fc

MECHANICAL	
Dimensions	$\Phi 67.5\text{mm} \times 27\text{mm}$
Connector	TNC (Female)
Weight	150 gram
Radome	ABS+PC
Attachment	8 screw holes
Base	Aluminum alloy 6061-T6
Vibration	3 axis,sweep=15min,10 to 200Hz sweep::3G
Shock	Vertical axis:50G,other axes: 30G

LNA	
Frequency Range	1164MHz~1286MHz
	1525MHz~1615MHz
LNA Gain	2.5-3.5dB
Noise Figure	≤ 2.0 dB@25°C , Typ. (Pre-filtered)
Output VSWR	$\leq 1.5:1$ typ. 1.8:1max
Operation Voltage	3.0 - 16V DC
Operation Current	$\leq 50\text{mA}$
Output of Band Rejection	L5/E5/L2/G2/B2
	<1050MHz: >55dB
	<1125MHz: >30dB
	>1350MHz: >45dB
	L1/E1/B1/G1
	<1450MHz: >40dB
	>1690MHz: >40dB
	>1730MHz: >45dB

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