SIDERION

[ANTENNA] \ **SA150**

High precision, multi-band L1/L2/L5 RHCP Active GNSS Antenna for surveying applications in demanding environments.

Datasheet - In Production



Features

- Multiband L1/L2/L5 active antenna
- 3V to 12V- 45mA power supply
- Low noise, High gain (45dB)
- Excellent out-of-the band rejection
- ⅝ - 11UNC threaded magnetic pod
- 1m long TNC to SMA cable provided

Applications

- RTK Base or Rover
- Surveying and mapping
- Ground vehicles
- Automated ports and docks
- Unmanned ships

Description

The Siderion **SA150** is an affordable and highly efficient multi-band GNSS active antenna designed for precision navigation and positioning applications.

It supports L1, L2 & L5 signal reception across BeiDou, GPS, GLONASS and Galileo satellite systems.

Engineered with a built-in multi-stage filter and low-noise amplifier, the SA150 delivers small phase center error and strong anti-interference capability.

Its IP67-rated enclosure ensures dustproof and waterproof protection, and with an operational temperature range of -40°C to +85°C, the SA275 is built to deliver reliable performance in the most demanding environments.

Table 1. Device summary

Order ref code	Temperature [°C]	Product size [mm]	Weight [g]
SID-GNSS-ANT-SA150	-40 to +85	152.0 x 67.5	380

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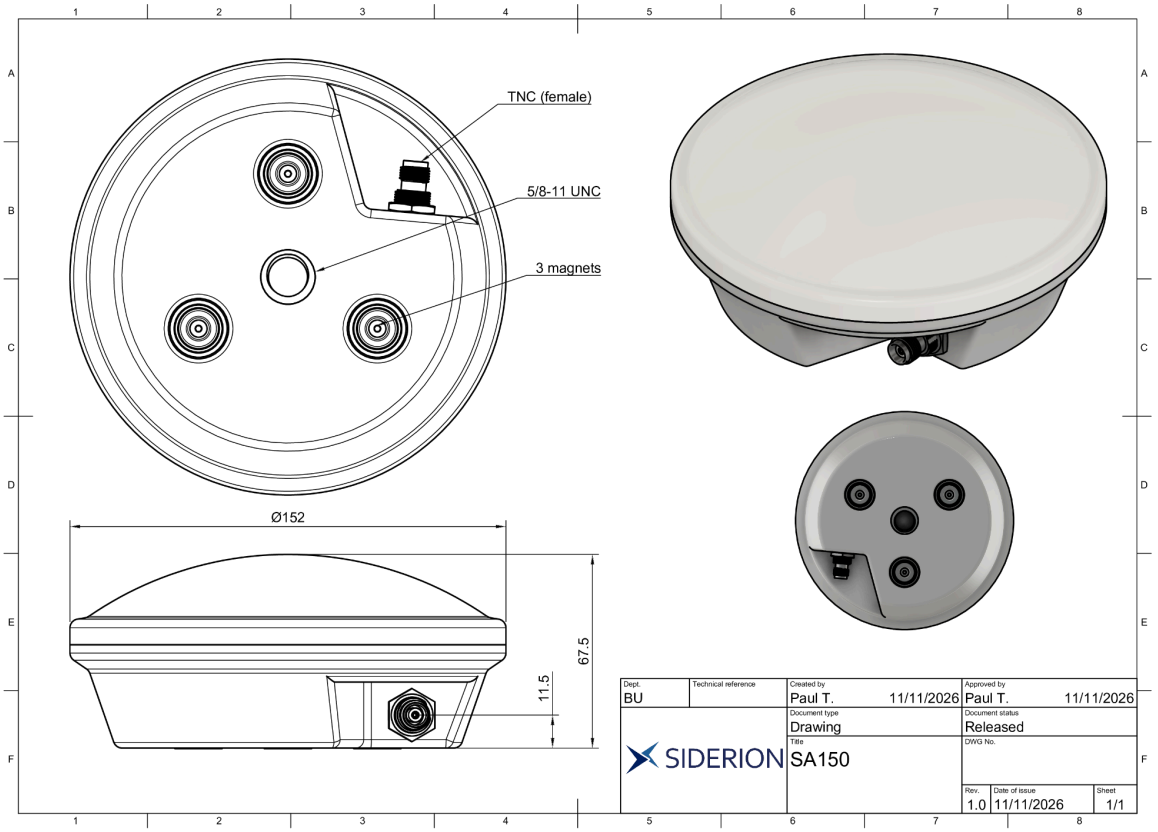
1. Specifications

Table 1. SA275 mechanical and electrical specifications

Symbol	Parameter	Value
ANTENNA		
Gband	GNSS signal bands	GPS: L1/L2/L5 GLONASS: G1/G2 BDS: B1/B2/B3 Galileo: E1/E2/E5a/E5b
Gpp	Peak gain	≥5.0 dBi
Pol	Polarization	RHCP
Arat	Axial ratio @ zenith	≤3.0dB
Acov	Azimuth coverage	360°
Z	Impedance	50Ω
Pce	Phase Center Error	± 2mm
LNA		
Vdd	Operating voltage	3.3V ~ 12.0V
Idd	Operating current	≤45mA
Fran	Frequency Range	1164MHz ~ 1278MHz 1525MHz ~ 1615MHz
Glna	LNA gain	45±2.0dB (Typ. @25°C)
MECHANICAL & ENVIRONMENTAL		
IP	IP rating	IP67
Con	Connector	TNC female
Wei	Weight	380g
Mat	Plastic material	ABS + PC
Top	Operating temperature	-40°C to +85°C
Size	Antenna dimensions	152.0 x 67.5mm
Feat	Other features	⅝ - 11UNC threaded insert Magnetic based

2. Mechanical drawings

Figure 1. SA150 v1.0 mechanical drawings



3. Revision history

Table 2. Document revision history

Date	Revision	Changes
11-Nov-2026	1.0	SiderionDoc_SA150 / Initial release

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