

TAS-50 is a two-axis positioner. It uses the GPS coordinates of the flying target (UAV, plane ...) to elaborate elevation and azimuth in real time.

TAS-50 is a compact positioner. It integrates all the necessary and sufficient electronics for its operation by the user. Thus, the only links necessary for the animation of the turret are the 230VAC supply voltage and the Ethernet monitoring link.

TAS-50 has already proved its ability to ensure precision and fluidity of turret movements under designation of real-time objective in extreme climatic conditions.

POSITIONER

Azimuth:	
Azimuth range	Unlimited rotation
Max speed	50°/s
Nominal dynamic torque / Dynamic intermittent torque	85 Nm / 135 Nm
Absolute accuracy	± 0.10°
Resolution	0.000015°
Elevation:	
Elevation range	-10° / +110°
Max speed	50 °/s
Nominal dynamic torque / Dynamic intermittent torque	85 Nm / 135 Nm
Absolute accuracy	± 0.10°
Resolution	0.022°
Acceptable winds:	
Established wind / Wind gusts	60 km/h / 75 km/h
Power & Voltage:	
Supply voltage Range	93 to 264 VAC-50 / 60Hz
Power on call current	5 A at 115 VAC
Average consumption	200 VA
Dimensions and Weight (without antennas):	
Dimensions	Overall dimensions: • Length: dia. 449mm • Width: dia. 866mm • Height: 1495mm
Weight	55 Kg
Load capacity:	
Total acceptable weight (antennas & structure)	50 kg
User interface connectors:	
Operating temperature	-20 ° to + 50 ° C
Turret sealing	IP64
Compass	electronic compass inside



- ✓ TAS-50 consists of two parts: elevation and azimuth, linked by an electric collector for the continuous rotation, and a 2 access RF rotary joint (slip ring)
- ✓ Azimuth and elevation movements are ensured by 2 reducers driven by 2 brushless servomotors equipped with resolvers
- ✓ The communication with the HMI software is handled via an Ethernet link
- ✓ Initialization: The ACU calculates the correction to be applied according to the electronic spirit level and compass information

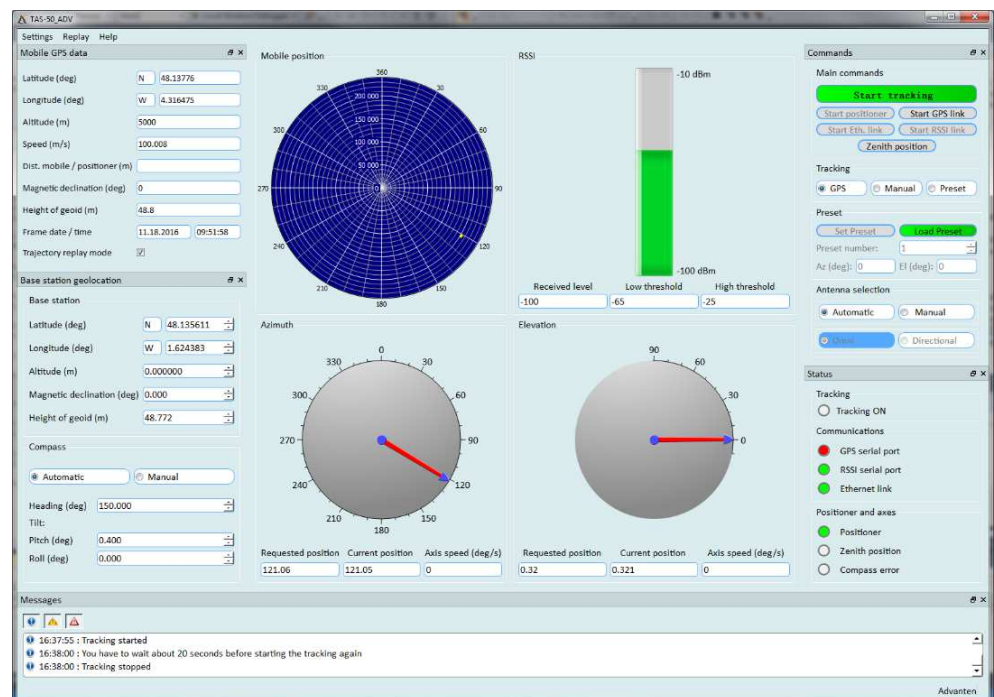
- ✓ Specific antennas can be provided and integrated with TAS-50 in order to provide the customer with a complete, tested and validated solution
- ✓ An automatic antenna switching system is included inside the positioner, to adapt to the distance of the target (near/far field)
- ✓ GPS auto tracking: The Automatic Control Unit (ACU) elaborates elevation and azimuth angles by using the target GPS coordinates of the target position in real time (downlink telemetry)

- ✓ The housings are made of aluminum, anticorrosion and are treated and painted
- ✓ TAS-50 is adaptable to multiple support types:
 - At ground: on a socket or a standard mechanical tripod,
 - On the roof of a truck: with a specific interface plate,
 - On a mast: with a specific interface
- ✓ This positioner can be customized in order to meet any specific requirements

SIMPLE & FRIENDLY HMI Software

TAS-50 has a dedicated software, through the color display, provides a user-friendly interface. It can be easily customized for specific user's needs. These are the main specifications:

- GPS tracking and system control
- Tracking signal level
- Manual control on axes
- Angular position presets
- Elevation and Azimuth angles
- Automatic and manual control on the antenna switching
- Automatic antenna switching depending on the received tracking signal level
- GPS mobile information
- Polar graph displaying the mobile trajectory
- Mobile position extrapolation: backup mode in case of loss of connection in auto-tracking. In this case, the antennas continue their race with extrapolated function of the position, speed and acceleration
- Compass and spirit level automatically or manually acquired
- Replay trajectory's mode



- Warning on GPS lost
- Alarms (can be saved)
- Translatable in any languages
- Others, upon customer's request

- ✓ An adapted rugged laptop can be provided in option

