

PRODUCT DATA SHEET

MARS ANTENNA TRACKER 300



OVERVIEW:

The Antenna Tracker was developed for BVLOS missions that require stable, high-quality communication between the ground station and UAVs, especially in environments with considerable obstructions and interference. It is an indispensable asset in expanding the boundaries of UAV operations, and consequently, improving the quality of data received and the effectiveness of the mission.



Plug & Play



**Adaptability to
Customer Needs**



ITAR Free



**Integrability with Various
Autopilots, Sensors and
Antennae**



**Prediction Mode Based on
Flight Mission**

MARS Antenna Tracker 300

Specifications:

Specification	Value	Description
AT Version	3.0	The latest version of the MARS Antenna Tracker ensures reliable performance and enhanced features.
Max. Load	5 kg	Maximum weight capacity of the mounted antenna or payload.
Driving	Precision Gear Driving	High-accuracy gear-driven mechanism for smooth and precise movements.
Pan Rotation Angle Range	[-180°, 270°]	450° of horizontal rotation for full coverage and tracking flexibility.
Tilt Rotation Angle Range	[-15°, 90°]	105° of Vertical rotation range for full coverage and tracking flexibility.
Pan Speed	120°/s	The maximum speed of horizontal rotation.
Tilt Speed	60°/s	Maximum speed of vertical rotation.
Motor Torque	8 N·m	High-torque motors to handle payloads and operate in challenging conditions.
Autopilot Interface	MARSFLY, Piccolo™, Pixhawk, Custom	Compatibility with popular autopilot systems for seamless integration.
Antenna Types	Grid Parabolic, Yagi, Patch, Custom	Supports various antenna designs for different communication needs.
Communication Interface	RS232	Standard communication interface for data exchange.
Baud Rate	9600, 57600, 115200, Custom	Multiple baud rate options for flexible communication setups.
Power Requirement	24VDC, 5A	Input power requirement for stable operation.
Consumption Power	≤75W	Maximum power consumption under full operation.
Working Temperature	-20°C to +80°C	Operating temperature range to ensure functionality in extreme environments.
Material	Aluminum alloy (AL-6063 T6)	Lightweight and durable material for long-term use and environmental resistance.
Size	300 x 110 x 300 mm	Dimensions of the antenna tracker without antenna or payload.
Weight	≤5 kg	The overall weight of the system without antenna or payload.