



The P300 intelligent flying robot is a fully autonomous device for exploring unknown environments, launched by OMNIGEO. It's simple, easy to use, and efficient. No prior information, GPS signal, or professional experience is required. The operator just needs to mark the area to be mapped with a 3D box or tap on the map to add patrol points, then start with one click to carry out the entire operation unmanned. The product uses disruptive technology to reshape work patterns in high-risk scenarios, making complex environment mapping easier, and ushering in a new era of truly unmanned operations.

Category	Parameter Item	Specification
Hardware Parameters	Weight	≤2.8kg
	Dimension	510mm × 510mm × 310mm
	Housing Material	Carbon Fiber Composite Material
	Rated Power	600W
	Flight Endurance	20 min
Operating Environment	Operating Temperature	-10℃ ~ 50℃
Battery	Battery Capacity	9000mAh
	Battery Energy	180Wh
	Charging Cut-off Voltage	25.2V
Core Functions	Function List	Fully Autonomous Flight
		Adaptive Obstacle Avoidance
		Relay Exploration
		3D Point Cloud Reconstruction
Gimbal Camera	Image Sensor	1/2.7 inch CMOS, 2MP effective pixels
	Lens FOV	Horizontal 160°
	Output Signal Interface	Ethernet Port
	Signal Input Mode	S.Bus, PWM, Network Port UDP
	Operating Voltage Range	12V
	Power Consumption	Average: 2W, Peak: 12W
	Pitch Rotation Range	-90° ~ +25°
Output Formats	Point Cloud Format	.las, .ply
	Video Format	.mp4
LiDAR	Field of View (FOV)	360° * 59°
	Laser Grade	Class1 / 905nm
	Relative Accuracy	1cm
	Absolute Accuracy	3cm
	Minimum Detectable Distance	0.1m
	Effective Detection Range	40m @ 10% reflectivity; 70m @ 80% reflectivity
	Point Rate	200,000 points per second