X11 Plus 动力套技术参数

X11 Plus Propulsion System Specification

动力套参数 All-in-One Thrust System Specification

产品型号 Model	X11 Plus	适配锂电池 Compatible Lithium Battery	LiPo-12~14S
额定电压 Rated Voltage	54 V	电压范围 Input Voltage	24~63 V
额定拉力 Rated Thrust	15~18 kg（海平面、环境温度25℃） 15~18 kg (sea level, ambient temperature 25℃)	最大拉力 Max Thrust	37 kg（海平面、环境温度25℃） 37 kg (sea level, ambient temperature 25℃)
额定拉力力效 Efficiency at Rated Thrust	8.0~7.4g/W	适用海拔 Operating Altitude	0~2000 m （不同环境温度下，海拔每升高 1500m，单轴起飞重量下调 5%~10%） (For every 1,500 m increase in altitude, the single-axis takeoff weight must be derated by 5% to 10% under different ambient temperatures.)
最大允许飞行速度（无风） Max Allowable Flight Speed (calm air)	13.8 m/s	适用环境温度 Operating Temperature	-20~50 ℃
防护等级 Ingress Protection	IPX6	动力套重量（含线、不含桨） Weight (with cable, without propeller)	2025±40 g
线材规格 Cable Specification	电源线：10AWG 1350±10 mm 信号线：1100±10 mm Power Cable: 10AWG 1350±10 mm Signal Cable: 1100±10 mm	适用碳管直径 Tube Outer Diameter	50 mm
线序 Pinout	黑-GND，白-PWM；黄-GND, 红-CH，绿-CL Black-GND, White-PWM & Yellow-GND, Red-CH, Green-CL	额定输出功率（最大持续功率） Rated Output Power (max continuous)	2130 W
额定转速 Rated RPM	2350 rpm	额定功率密度 Rated Power Density	1.88 kW/kg

*本产品标注的拉力性能参数，均基于好盈封闭实验室（海平面，环境温度25℃）测试平台独立测试获得。
*在实际飞行工况中，受飞控系统适配程度、整机构型布局差异、重心配置状态等多重因素影响，各轴电机的实际输出功率并非完全均等，存在分配差异。产品选型时请充分考量上述工况偏差，建议以官方推荐的额定拉力参数作为选型依据。
*The thrust performance parameters of this product are independently measured on the test bench in Hobbywing's enclosed laboratory (sea level, ambient temperature 25℃).
*In real flight scenarios, multiple factors such as flight controller matching, airframe layout differences and center-of-gravity configuration can lead to unequal actual output power for motors on each axis, resulting in power distribution imbalance. Fully account for such operational deviations when selecting products; use the official recommended rated thrust as the selection reference.

电调技术参数 ESC Specification

电压范围 Input Voltage	24~63 V	通讯方式 Communication Protocol	HWCAN
电调尺寸 ESC Size	114*64.5*35.5 mm	重量（不含线） Weight (with cable)	209 g
最大电流（3s） Peak Current (3s)	150 A (54 V)	持续电流 Continuous Current	50 A (54 V)
防护等级 Ingress Protection	IPX6	油门源 Throttle Source	PWM+CAN
PWM脉宽 Operating Pulse Width	1050~1950 μs	黑匣子功能 Black Box	故障数据 Fault data
油门行程校准 Throttle Range Calibration	固化不可校准，软件可修改范围 Solidified and cannot be calibrated (can be changed via DataLink software)		

电机技术参数 Motor Specification

KV值 KV	85 KV	槽极数 Slot & Pole	36槽40极 36N40P
电机外径 Motor Diameter	120 mm	电机重量（含线） Weight (with cable)	1135 g
防护等级 Ingress Protection	IPX6	桨叶安装尺寸 Propeller Mounting Dimensions	D31-4*M5，中心孔D15 D31-4*M5, centre hole D15

桨叶参数 Propeller Specification

产品型号 Model	MFP 43x14	重量 Weight	427 g
主要材质 Material of Propeller	碳纤维增强尼龙复合材料 Carbon fibre-reinforced nylon composite material	安装尺寸 Mounting Dimensions	D31-4*M5，中心孔D15 D31-4*M5, centre hole D15
安装螺丝锁紧扭矩 Mounting Screw Tightening Torque	3 N·m	适用海拔 Operating Altitude	0~2000 m
桨根到桨尖的距离 Blade Length (end of root to tip)	523.16 mm		