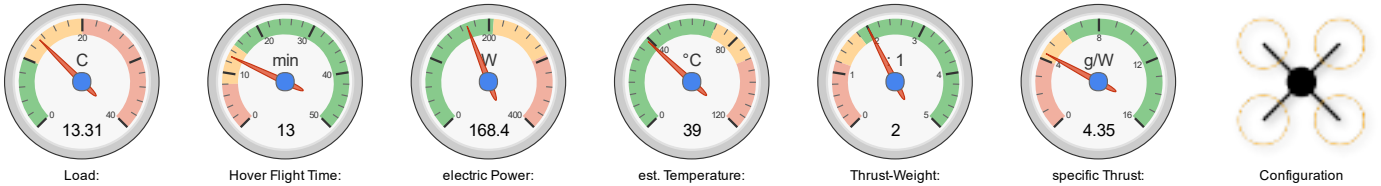


all data without guarantee - Accuracy: +/-15%

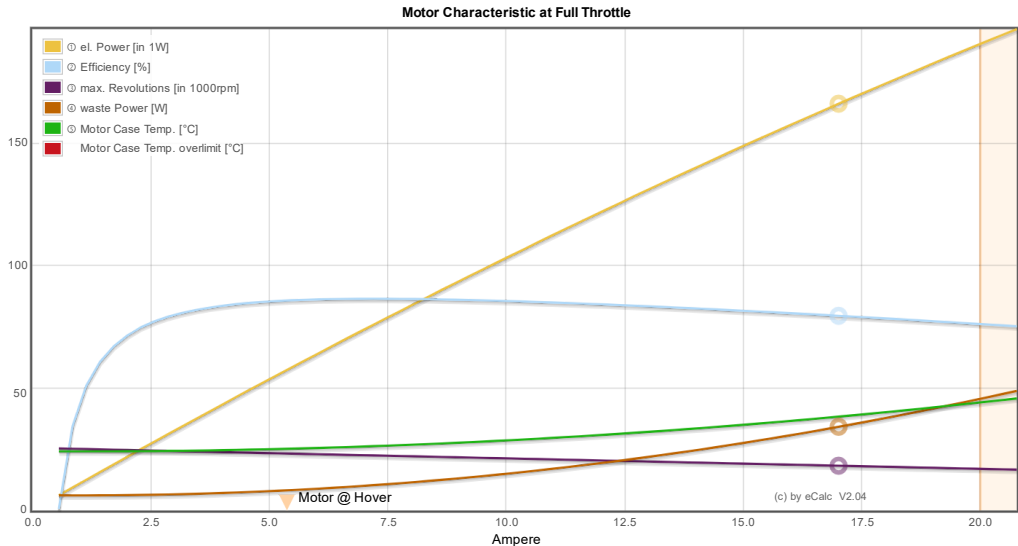
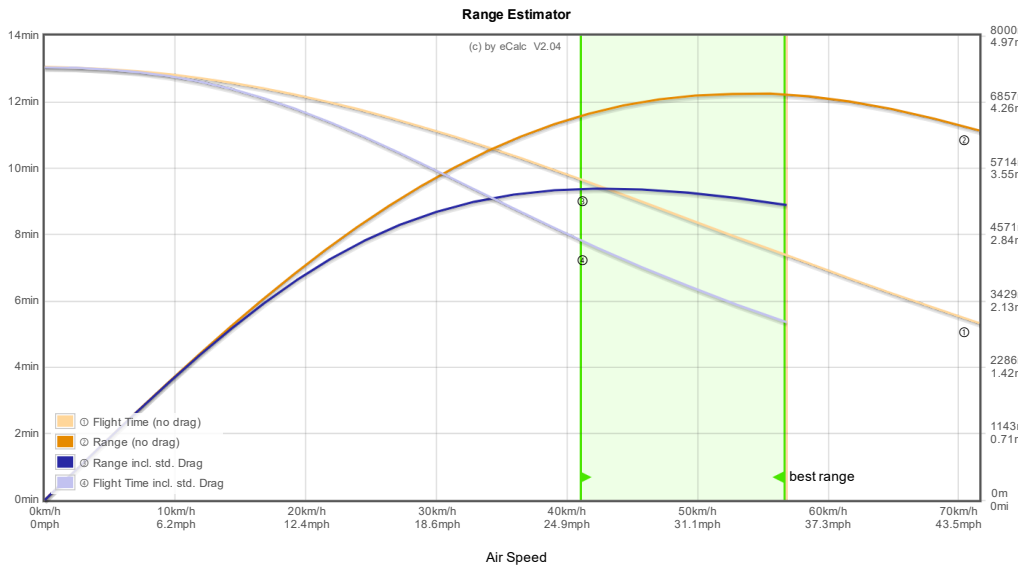
xcopterCalc - Multicopter Calculator

News | Toolbox | Easy View | Help | Tutorial | Submit Specs | Language: english

General	Motor Cooling: excellent	# of Rotors: 4	Model Weight: 500 g	without Drive	Frame Size: 333 mm	FCU Tilt Limit: no limit	Field Elevation: 305 m ASL	Air Temperature: 21 °C	Pressure (QNH): 1013 hPa
		flat	17.6 oz		13.11 inch		1001 ft ASL	70 °F	29.91 inHg
Battery Cell	Type (Cont. / max. C) - charge state: custom - normal	Configuration: 3 S 1 P	Cell Capacity: 5200 mAh	max. discharge: 90%	Resistance: 0.006 Ohm	Voltage: 3.7 V	C-Rate: 10 C cont.	Weight: 111 g	
			5200 mAh total				20 C max	3.9 oz	
Controller	Type: custom	Current: 12 A cont.	Resistance: 0.007 Ohm	Weight: 5.3 g	Accessories		Current drain: 0 A	Weight: 0 g	
		20 A max		0.2 oz				0 g	
Motor	Manufacturer - Type (Kv): SunnySky X2204S-II-2300 ² (2300)	KV (w/o torque): 2300 rpm/V	no-load Current: 0.5 A @ 10 V	Limit (up to 15s): 295 W	Resistance: 0.1 Ohm	Case Length: 14.6 mm	# mag. Poles: 14	Weight: 25 g	
	search... Prop-Kv-Wizard					0.57 inch		0.9 oz	
Propeller	Type - yoke twist: GemFan - 0°	Diameter: 6 inch	Pitch: 4 inch	# Blades: 2	PConst / TConst: 1.13 / 0.88	Gear Ratio: 1 : 1	<input type="button" value="calculate"/>		
		152.4 mm	101.6 mm						



Remarks:	Battery	Motor @ Optimum Efficiency	Motor @ Maximum	Motor @ Hover	Total Drive	Multicopter
	Load: 13.31 C	Current: 6.95 A	Current: 17.31 A	Current: 5.38 A	Drive Weight: 500 g	All-up Weight: 1000 g
	Voltage: 9.85 V	Voltage: 10.55 V	Voltage: 9.73 V	Voltage: 10.68 V	Thrust-Weight: 17.6 oz	add. Payload: 35.3 oz
	Rated Voltage: 11.10 V	Revolutions*: 22559 rpm	Revolutions*: 18132 rpm	Revolutions*: 11355 rpm	Current @ Hover: 21.53 A	max Tilt: 55 °
	Energy: 57.72 Wh	electric Power: 73.3 W	electric Power: 168.4 W	Throttle (log): 46 %	P(in) @ Hover: 238.9 W	max. Speed: 73 km/h
	Total Capacity: 5200 mAh	mech. Power: 63.3 W	mech. Power: 133.3 W	Throttle (linear): 56 %	P(out) @ Hover: 184.1 W	45.3 mph
	Used Capacity: 4680 mAh	Efficiency: 86.4 %	Power-Weight: 674.0 W/kg	electric Power: 57.5 W	Efficiency @ Hover: 77.1 %	est. rate of climb: 11.7 m/s
	min. Flight Time: 4.1 min		305.7 W/lb	mech. Power: 46.0 W	P(in) @ max: 768.3 W	2303 ft/min
	Mixed Flight Time: 9.9 min		Efficiency: 79.1 %	Power-Weight: 239.0 W/kg	P(out) @ max: 533.0 W	Total Disc Area: 7.30 dm ²
	Hover Flight Time: 13.0 min		est. Temperature: 39 °C	108.4 W/lb	Efficiency @ max: 69.4 %	with Rotor fail:
	Weight: 333 g		102 °F	Efficiency: 80.1 %		
	11.7 oz		Wattmeter readings	est. Temperature: 27 °C		
			Current: 69.24 A	81 °F		
			Voltage: 9.85 V	specific Thrust: 4.35 g/W		
			Power: 682 W	0.15 oz/W		
<input type="button" value="share"/>					<input type="button" value="add to >>"/>	<input type="button" value="Download .csv (0)"/>
						<input type="button" value="<< clear"/>



Important Note: Before flight recheck your max. current! If your Current, el. Power or RPM are over the manufacturers limits your motor, controller and/or battery may take damage! **Verify before flight by measurement!**

for printing use Landscape format
* The manufacturer limitation is NOT monitored
** Testdata with reduced accuracy