

all data without guarantee - Accuracy: +/-10%

propCalc - Propeller Calculator

Help | Language: english

General	Motor Cooling: <input type="text" value="medium"/>	Model Weight: <input type="text" value="1700"/> g <input type="text" value="60"/> oz	<input type="text" value="incl. Drive"/>	Field Elevation: <input type="text" value="500"/> m ASL <input type="text" value="1640"/> ft ASL	Air Temperature: <input type="text" value="25"/> °C <input type="text" value="77"/> °F	Pressure (QNH): <input type="text" value="1013"/> hPa <input type="text" value="29.91"/> inHg		
Battery Cell	Type (Cont. / max. C) - charge state: <input type="text" value="LiPo 2100mAh - 65/100C"/> - <input type="text" value="normal"/>	Configuration: <input type="text" value="7"/> S <input type="text" value="1"/> P	Cell Capacity: <input type="text" value="2100"/> mAh	Total Capacity: <input type="text" value="2100"/> mAh	Resistance: <input type="text" value="0.0048"/> Ohm	Voltage: <input type="text" value="3.7"/> V	C-Rate: <input type="text" value="65"/> C cont. <input type="text" value="100"/> C max	Weight: <input type="text" value="59"/> g <input type="text" value="2.1"/> oz
Controller	Type: <input type="text" value="CC Phoenix Ice HV 40"/>	cont. Curent: <input type="text" value="40"/> A	max. Curent: <input type="text" value="40"/> A	Resistance: <input type="text" value="0.0025"/> Ohm	Weight: <input type="text" value="34"/> g <input type="text" value="1.2"/> oz			
Motor	Manufacturer - Type (Kv): <input type="text" value="NeuMotors"/> <input type="text" value="custom"/>	KV (w/o torque): <input type="text" value="205"/> rpm/V	no-load Current: <input type="text" value="0.3"/> A @ <input type="text" value="10"/> V	Limit (up to 15s): <input type="text" value="3000"/> W	Resistance: <input type="text" value="0.16"/> Ohm	Case Length: <input type="text" value="49"/> mm <input type="text" value="1.93"/> inch	# mag. Poles: <input type="text" value="8"/>	Weight: <input type="text" value="350"/> g <input type="text" value="12.3"/> oz
Propeller	Type - yoke twist: <input type="text" value="APC Electric E"/> - <input type="text" value="0°"/>	Diameter: <input type="text" value="18"/> inch	Pitch: <input type="text" value="4.7"/> inch	# Blades: <input type="text" value="2"/>	PConst: <input type="text" value="1.08"/>	Gear Ratio: <input type="text" value="1"/> : 1	<input type="button" value="calculate"/>	

Remarks:

Battery	Motor @ Optimum Efficiency	Motor @ Maximum	Propeller	Total Drive
Load: 4.66 C	Current: 7.13 A	Current: 9.79 A	Static Thrust: 1677 g	Drive Weight: 877 g
Voltage: 25.57 V	Voltage: 25.64 V	Voltage: 25.55 V	Revolutions: 4755 rpm	All-up Weight: 1700 g
Rated Voltage: 25.90 V	Revolutions: 4906 rpm	Revolutions: 4755 rpm	Stall Thrust: 2413 g	60 oz
Flight Time*: 12.9 min	electric Power: 182.8 W	electric Power: 250.2 W	Pitch Speed: 35 km/h	Power-Weight: 149 W/kg
Mixed Flight Time: 21.9 min	mech. Power: 166.9 W	mech. Power: 227.3 W	22 mph	68 W/lb
Weight: 413 g	Efficiency: 91.3 %	Efficiency: 90.8 %	Tip Speed: 410 km/h	Thrust-Weight: 0.99 : 1
14.6 oz		est. Temperature: 34 °C	255 mph	P(in) @ max: 253.7 W
		93 °F	specific Thrust: 6.70 g/W	P(out) @ max: 227.3 W
			0.24 oz/W	Efficiency @ max: 89.6 %

Motor Characteristics

