



all Data without guarantee!
Accuracy +/-10%

The Prop Calculator works with JavaScript.
Therefore you have to turn it on in your Browser.

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Design Fundamentals:

metric units <input type="button" value="v"/>	Model Weight: 2300 g <input type="button" value="incl. Drive"/>	Field Elevation: 300 m ASL	Air Temp: 13 °C	Pressure (QNH): 1013 hPa		
Battery: (continuous / max. C) - charge state LiPo 4000mAh - 45/60C <input type="button" value="normal"/>	# serial: 4 S	# parallel: 1 P	Capacity: 4000 mAh	Resistance: 0.0031 Ohm	Volt per Cell: 3.7 V	Weight per Cell: 112 g
Controller: max 40A <input type="button" value="v"/>	Resistance: 0.006 Ohm	Continuous Current: 40 A	max. Current: 40 A	Weight: 50 g	Motor Weight: 283 g	
Motor: Manufacturer - Type (Kv in rpm/V) Dualsky XM4260CA-6 (566) <input type="button" value="v"/>	Kv (w/o torque): 566 rpm/V	Resistance: 0.023 Ohm	no-load Current: 2.11 A @ 10 V	Limit (up to 20s): 1100 W <input type="button" value="v"/>	# mag. Poles: 14	Case length: 60 mm
Propeller: Type - yoke twist APC Electric E <input type="button" value="v"/> 0° <input type="button" value="v"/>	Diameter: 15 inch	Pitch: 4 inch	# Blades: 2	Prop Const.: 1.08	Gear Ratio: 1.00 :1	<input type="button" value="calculate"/>

Approx. Values:

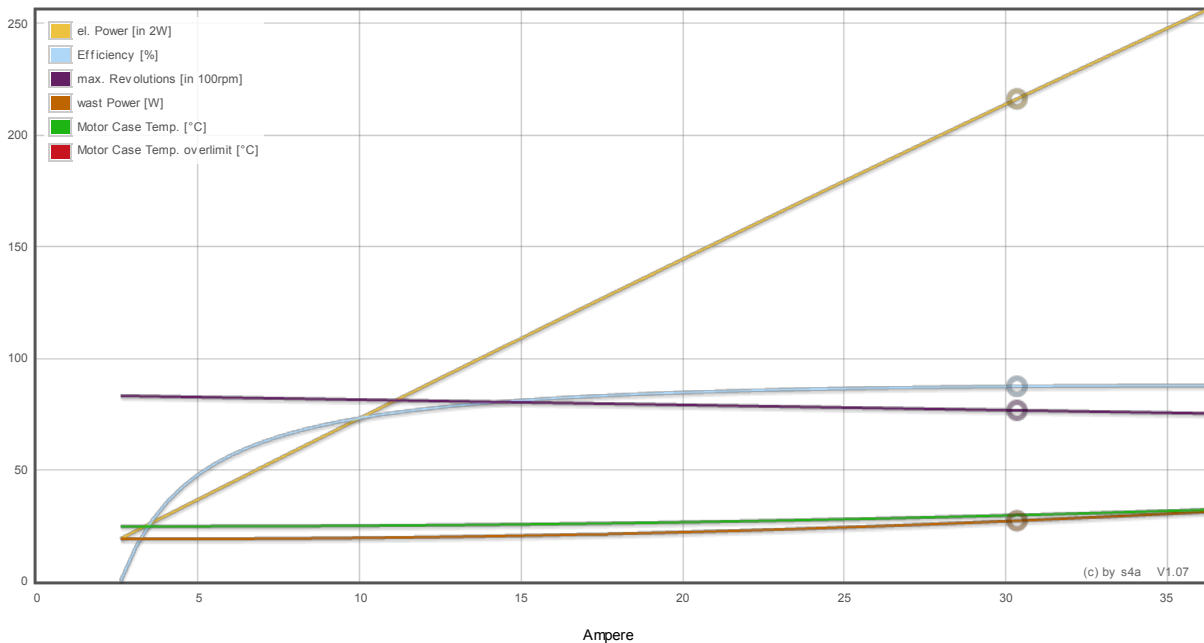
Warning:

Battery:	Load: 7.6 C	Voltage: 14.42 V	Rated Voltage: 14.8 V	Flight Time*: 7.85 min	mixed Flight Time: 13.35 min	Weight: 448 g
Motor:	max. Current: 30.56 A	Voltage: 14.24 V	Revolutions: 7661 rpm	el. Power (in): 435.1 W	mech. Power (out): 380.36 W	Efficiency: 87.4 %
Optimal Efficiency:	Current: 38.61 A	Voltage: 14.09 V	Revolutions: 7472 rpm	el. Power (in): 544 W	mech. Power (out): 477.77 W	Efficiency: 87.8 %
Propeller:	Static Thrust: 2136.7 g 75.37 oz	Prop Stall Thrust: 3016.3 g 106.4 oz	Revolutions: 7661 rpm	Pitch Speed: 46.7 km/h 29 mph	Tip Speed: 550.2 km/h 342 mph	Prop Efficiency: 4.91 g/W 0.17 oz/W
Entire Drive:	Weight: 859.1 g Drive 2300 g Total	Power-Weight: 197 W/kg 5.58 W/oz	Thrust-Weight: 0.93 :1	P (in): 452.29 W	P (out): 380.36 W	Efficiency: 84.1 %

Motor Data:

Motor Cooling:

Power Scale:



Important Note:

Before flight recheck the 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

* Flight Time @ Full Power

** Testdata with reduced accuracy

[generate Link](#) > www.eCalc.ch/motorcalc_e.htm?eCalc&weight=2300&calc=auw&elevation=300&airtemp=13&batteries=liPo_4000mah_45/60c&s=4&p=1&chargestate=normal&esc=max_40a&motor=dualsky&type=xm4260ca-6&propeller=apcElectricE&pitch=4&blades=2&gear=1.00



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V P5.17 06.09.12 / Data: 29.11.12 with 2754 Motors

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