

548

Member Full Version

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



xcopterCalc - Multicopter Calculator

Welcome Simon

Membership Expiry: 16/05/15

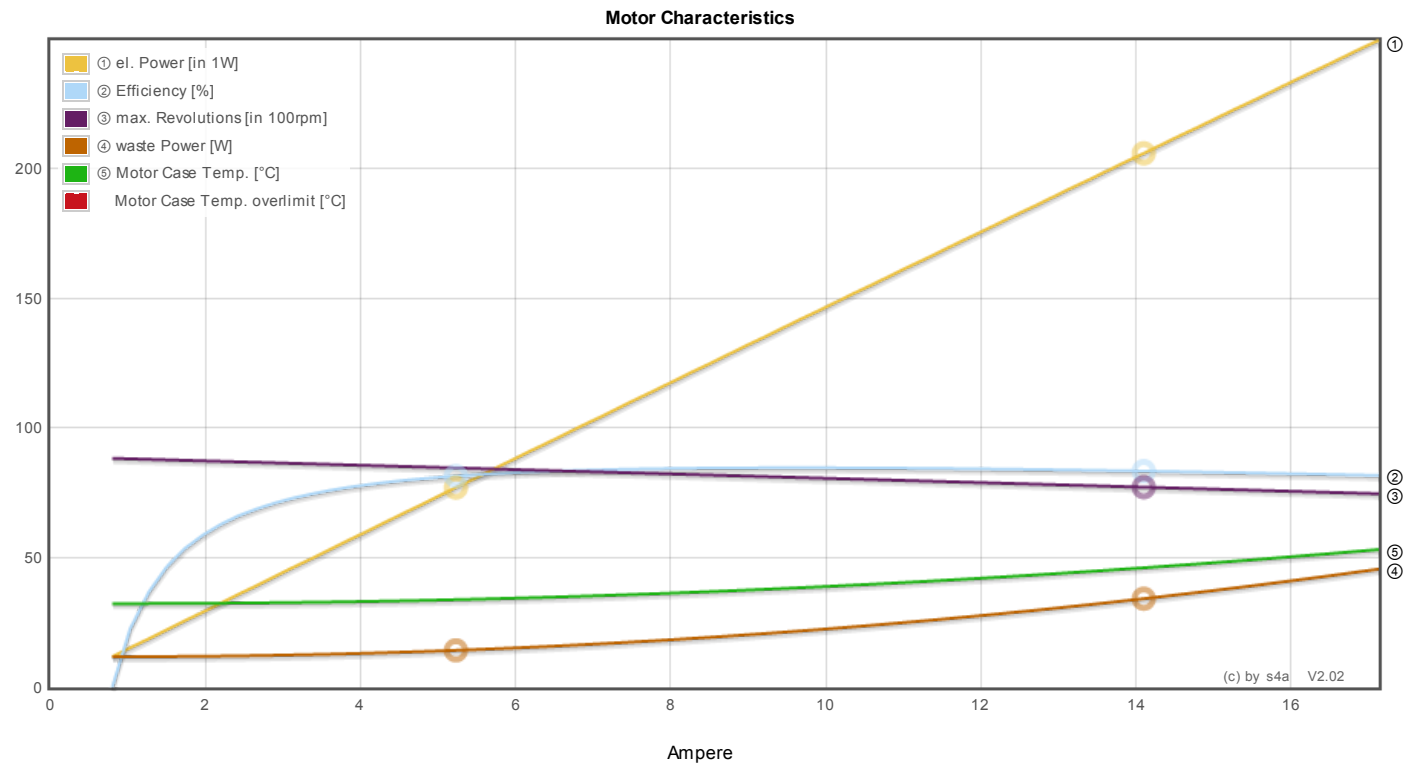
[Logout](#) - [Profile](#)[News](#) | [Help](#) | [Submit Specs](#) | Language: english ▼Airy Light Weight
Tripod (WT-330A)[HeliPal](#)

A\$20.79

General	Motor Cooling:	# of Rotors:	Model Weight:		Field Elevation	Air Temperature	Pressure (QNH):	
	<input data-bbox="224 467 336 494" type="text" value="medium"/>	<input data-bbox="645 467 719 494" type="text" value="6"/> <input data-bbox="645 507 705 534" type="text" value="flat"/>	<input data-bbox="857 467 931 494" type="text" value="3000"/> g <input data-bbox="857 507 958 534" type="text" value="105.8"/> oz	<input data-bbox="1086 467 1232 494" type="text" value="incl. Drive"/>	<input data-bbox="1417 467 1491 494" type="text" value="500"/> m ASL <input data-bbox="1417 507 1518 534" type="text" value="1640"/> ft ASL	<input data-bbox="1585 467 1659 494" type="text" value="25"/> °C <input data-bbox="1585 507 1659 534" type="text" value="77"/> °F	<input data-bbox="1753 467 1854 494" type="text" value="1013"/> hPa <input data-bbox="1753 507 1877 534" type="text" value="29.91"/> inHg	
Battery Cell	Type (Cont. / max. C) - charge state:	Configuration:	Cell Capacity:	Total Capacity:	Resistance:	Voltage:	C-Rate:	Weight:
	<input data-bbox="224 579 490 606" type="text" value="custom"/> - <input data-bbox="517 579 613 606" type="text" value="normal"/>	<input data-bbox="645 579 705 606" type="text" value="4"/> S <input data-bbox="745 579 806 606" type="text" value="1"/> P	<input data-bbox="857 579 981 606" type="text" value="16000"/> mAh	<input data-bbox="1086 579 1209 606" type="text" value="16000"/> mAh	<input data-bbox="1265 579 1366 606" type="text" value="0.0013"/> Ohm	<input data-bbox="1417 579 1491 606" type="text" value="3.7"/> V	<input data-bbox="1585 579 1659 606" type="text" value="45"/> C cont. <input data-bbox="1585 619 1659 646" type="text" value="60"/> C max	<input data-bbox="1753 579 1854 606" type="text" value="320"/> g <input data-bbox="1753 619 1854 646" type="text" value="11.3"/> oz
Controller	Type:	cont. Current:	max. Current:		Resistance:			Weight:
	<input data-bbox="224 686 510 713" type="text" value="max 30A"/>	<input data-bbox="645 686 719 713" type="text" value="30"/> A	<input data-bbox="857 686 954 713" type="text" value="30"/> A		<input data-bbox="1265 686 1361 713" type="text" value="0.008"/> Ohm			<input data-bbox="1753 686 1850 713" type="text" value="40"/> g <input data-bbox="1753 726 1850 753" type="text" value="1.4"/> oz
Motor	Manufacturer - Type (Kv):	KV (w/o torque):	no-load Current:	Limit (up to 15s):	Resistance:	Case Length:	# mag. Poles:	Weight:
	<input data-bbox="224 794 378 821" type="text" value="Tarot"/> <input data-bbox="398 794 591 821" type="text" value="4006/620KV (620)"/>	<input data-bbox="645 794 719 821" type="text" value="620"/> rpm/V	<input data-bbox="857 794 931 821" type="text" value="0.8"/> A @ <input data-bbox="974 794 1048 821" type="text" value="14.8"/> V	<input data-bbox="1086 794 1160 821" type="text" value="426"/> W <input data-bbox="1180 794 1232 821" type="text" value=""/>	<input data-bbox="1265 794 1361 821" type="text" value="0.126"/> Ohm	<input data-bbox="1417 794 1491 821" type="text" value="30"/> mm <input data-bbox="1417 834 1518 861" type="text" value="1.18"/> inch	<input data-bbox="1585 794 1659 821" type="text" value="22"/>	<input data-bbox="1753 794 1850 821" type="text" value="82"/> g <input data-bbox="1753 834 1850 861" type="text" value="2.9"/> oz
	<input data-bbox="224 834 342 861" type="text" value="search..."/>							
Propeller	Type - yoke twist:	Diameter:	Pitch:	# Blades:	PConst:	Gear Ratio:		
	<input data-bbox="224 906 490 933" type="text" value="custom"/> - <input data-bbox="517 906 600 933" type="text" value="0°"/>	<input data-bbox="645 906 719 933" type="text" value="11"/> inch	<input data-bbox="857 906 954 933" type="text" value="5.5"/> inch	<input data-bbox="1086 906 1160 933" type="text" value="2"/>	<input data-bbox="1265 906 1339 933" type="text" value="1.3"/>	<input data-bbox="1417 906 1491 933" type="text" value="1"/> : 1	<input data-bbox="1753 906 1850 933" type="text" value="calculate"/>	

Remarks:

Battery		Motor @ Optimum Efficiency		Motor @ Maximum		Motor @ Hover		Total Drive	
Load:	5.35 C	Current:	9.13 A	Current:	14.27 A	Current:	5.37 A	Drive Weight:	2213 g
Voltage:	14.35 V	Voltage:	14.44 V	Voltage:	14.24 V	Voltage:	14.59 V		78.1 oz
Rated Voltage:	14.80 V	Revolutions*:	7994 rpm	Revolutions*:	7483 rpm	Throttle (linear):	56 %	All-up Weight:	3000 g
Flight Time:	11.2 min	electric Power:	131.8 W	electric Power:	203.3 W	electric Power:	78.4 W		105.8 oz
Mixed Flight Time:	13.8 min	mech. Power:	111.6 W	mech. Power:	168.9 W	mech. Power:	64.1 W	add. Payload:	1170 g
Hover Flight Time:	25.3 min	Efficiency:	84.7 %	Efficiency:	83.1 %	Efficiency:	81.8 %		41.3 oz
Weight:	1280 g			est. Temperature:	46 °C	est. Temperature:	34 °C	Current @ Hover:	32.22 A
	45.1 oz				115 °F		93 °F	P(in) @ Hover:	476.9 W
						specific Thrust:	6.38 g/W	P(out) @ Hover:	384.7 W
							0.23 oz/W	Efficiency @ Hover:	80.7 %
								Current @ max:	85.64 A
								P(in) @ max:	1267.5 W
								P(out) @ max:	1013.6 W
								Efficiency @ max:	80.0 %



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 measurment!**

[generate link](#) >

for printing use Landscape format

* The manufacturer limitation is NOT monitored

** Testdata with reduced accuracy

(c) copyright by and intellectual property of Markus Mueller, Solution for All, www.s4a.ch, [info\[at\]jecalc.ch](mailto:info[at]jecalc.ch)

See HTML Source for full and complete copyright notice.
Version: X6.511, 12.06.14 / Data: 14.06.14 with 3781 Motors

translated to english by Markus Mueller

2607885
*** **