

Work Area:									
Motor Data Sheet Info	Wt. grams	Kv	Idle Current Io	Motor Resistance	Amps In Max Con.	Watts In Max Con.	Rec Min # of Cells	Rec Max # of Cells	
Racerstar 1306/3100Kv	11	3100	0.50		6.6	49	1	2	

Assumed Idle Factors	Av Volts In	Idle I	Resistance	Watts
1C	3.7	0.5	7.4	1.85
2C	7.4	0.5	14.8	3.7

Work Area:											
Propellor Data Sheet Info	Mfg Name	Diameter	Pitch	# of Cells	Voltage	Motor Amps	Watts In	Prop RPM	Thrust Grams	Kv	RE
1 MFG 1306/3100Kv	MFG Data	5.0	4.3	2	7.40	6.60	48.84	22940	212	3100	470
2 MFG 1306/3100Kv	MFG Data	6.0	2.0	2	7.40	6.00	44.40	22940	218	3100	517
3 MFG 1306/3100Kv	MFG Data	6.0	3.0	2	7.40	6.40	47.36	22940	226	3100	484
4 Racerstar 1306/3100Kv	Gemfan EP Hyper Flight	5.0	3.0	2	7.60	4.84	36.78	13648	172	1796	371
5 Racerstar 1306/3100Kv	Folding	6.0	3.0	2	7.76	6.20	48.11	10360	173	1335	215
6 Racerstar 1306/3100Kv	APC E	5.1	4.5	2	7.76	6.72	52.15	9285	149	1197	178
7 Racerstar 1306/3100Kv	APC E	4.75	4.75	2	7.75	5.79	44.87	11367	106	1467	253
8 Racerstar 1306/3100Kv	Gemfan EP	6.0	3.0	2	7.55	5.62	42.43	11523	200	1526	272

Results:	Watts Output	System Eff.	(g/w) Eff.	Rec. ESC Amps Min	# LiPo Cells	Batt. mAh	Safe C-rate	Flight Time	Notes:
1 MFG 1306/3100Kv	45	92%	4.34	8	2	400	21	5	1) Flight time based on 100% Throttle continuous
2 MFG 1306/3100Kv	41	92%	4.91	8	2	400	19	5	
3 MFG 1306/3100Kv	44	92%	4.77	8	2	400	20	5	2) C-Rate Safety Factor is 1.25 times Amps in
4 Racerstar 1306/3100Kv	33	90%	4.68	8	2	300	20	5	
5 Racerstar 1306/3100Kv	44	92%	3.60	8	2	400	19	5	3) Choosing a smaller Batt requires Higher C-Rate!
6 Racerstar 1306/3100Kv	48	93%	2.86	8	2	400	21	5	
7 Racerstar 1306/3100Kv	41	91%	2.36	8	2	400	18	5	
8 Racerstar 1306/3100Kv	39	91%	4.71	8	2	300	23	5	

COLOR DEFINITION:

CAUTION!! HIGH AMP DRAW!!

CURRENT TO HIGH, NOT RECOMMENDED!!