

Work Area:			Idle Current	Motor	Amps In	Watts In	Rec Min	Rec Max
Motor Data Sheet Info	Wt. grams	Kv	Io	Resistance	Max Con.	Max Con.	# of Cells	# of Cells
Emax MT 1806/2280	19	2280	0.50		12		2	4

There is a lack of Technical specs for this motor other than physical size and a Continuous Amp input of 12A with a burst of 15A.

With the lack of a Watt limit, I did run the motor at 100% for a minute and a half watching the meters closely and then touch testing the motor.

Since it was only warm to the touch I feel pretty confident the running in the 140 Watt range should be pretty safe with this motor. This is only best guess.

Assumed Idle Factors	Av Volts In	Idle I	Resistance	Watts
2C	7.4	0.5	14.8	3.7
3C	11.1	0.5	22.2	5.55

Work Area:											
Propellor Data Sheet Info	Mfg Name	Diameter	Pitch	# of Cells	Voltage	Motor Amps In	Watts In	Prop RPM	Thrust Grams	Kv	RE
1 Mfg Data 1806/2280Kv	Carbon Fiber	5.0	3.0	2	7.4	4.4	32.56	13530	210	1828	416
2 Mfg Data 1806/2280Kv	APC E	6.0	4.0	2	7.4	6.8	50.32	12030	280	1626	239
3 Mfg Data 1806/2280Kv	Carbon Fiber	5.0	3.0	3	11.1	8	88.80	18510	380	1668	208
4 Mfg Data 1806/2280Kv	APC E	6.0	4.0	3	11.1	11.3	125.43	15160	460	1366	121
5 Emax MT 1806/2280Kv	Gemfan EP	5.0	3.0	2	8.05	3.72	29.95	18957	174	2355	633
6 Emax MT 1806/2280Kv	Gemfan EP	6.0	3.0	2	8.05	5.17	41.62	17495	244	2173	420
7 Emax MT 1806/2280Kv	APC E	6.0	4.0	2	7.76	6.88	53.39	14897	246	1920	279
8 Emax MT 1806/2280Kv	Gemfan EP	5.0	3.0	3	12.3	7.06	86.84	26911	353	2188	310
9 Emax MT 1806/2280Kv	Gemfan EP	6.0	3.0	3	12.15	9.61	116.76	23976	482	1973	205
10 Emax MT 1806/2280Kv	APC E	6.0	4.0	3	12.01	11.86	142.44	19411	455	1616	136

Results:	Watts Output	System Eff.	(g/w) Eff.	Rec. ESC Amps Min	# LiPo Cells	Batt. mAh	Safe C-rate	Flight Time	Notes:
1 Mfg Data 1806/2280Kv	29	89%	6.45	14	2	300	18	5	1) Flight time based on 100% Throttle continuous
2 Mfg Data 1806/2280Kv	47	93%	5.56	14	2	400	21	5	
3 Mfg Data 1806/2280Kv	83	94%	4.28	14	3	500	20	5	2) C-Rate Safety Factor is 1.25 times Amps in
4 Mfg Data 1806/2280Kv	120	96%	3.67	14	3	600	24	5	
5 Emax MT 1806/2280Kv	26	87%	5.81	14	2	200	23	5	3) Choosing a smaller Batt requires Higher C-Rate!
6 Emax MT 1806/2280Kv	38	90%	5.86	14	2	300	22	5	
7 Emax MT 1806/2280Kv	50	93%	4.61	14	2	400	22	5	
8 Emax MT 1806/2280Kv	81	93%	4.07	14	3	400	22	5	
9 Emax MT 1806/2280Kv	111	95%	4.13	14	3	600	20	5	
10 Emax MT 1806/2280Kv	136	96%	3.19	14	3	700	21	5	

COLOR DEFINITION:

CAUTION!! HIGH AMP DRAW!!

CURRENT TO HIGH, NOT RECOMMENDED!!