

ELECTRIC MOTOR TEST DATA SHEET rev1 01/02/21

Date of Test 30/03/2021

Motor Details

Make	Size	Watts	Kv Factor
Overlander Thumper	T3530/14	340 W	1100 Kv

Test Rig Components

Battery # Cells	Esc Amps	Watt Meter	Rev Meter
2200maH 3s	4Max 30A	MayTech 150A	N/A

Test Data Results

Prop Size	Thrust (Grams)				Amps				Watts			
	25%/50%/75%/100%				25%/50%/75%/100%				25%/50%/75%/100%			
8x6 TF (IC)	190	608	960	960	1.0	4.0	16	20	16.2	47	170	210
9x4 TF (IC)	175	455	840	840	2.0	6.2	12.6	13.7	23	40	115	149
10x5 APC (IC)	200	610	1060	1048	2.6	7.2	20.3	20.5	28	80	210	205
10x6 APC (IC)	106	530	1000	925	1.2	8.4	20	21	12	50	210	210
11x7E APC	213	825	1270	1270	1.1	4.3	20	24	13	49.5	245	265

Model Details

Name	Size(span inches)	Weight(Kg)	Type	Motor Size
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Comments/conclusions

Prop size is specified from 9" up. With the exception of one prop I have had to use IC props for the tests. May re-run again if I can get suitable E props. This motor is intended to be a temporary substitute for the WAT4 motor which is to be replaced. As the T3530 is a smaller motor, the purpose of this test is to optimize the thrust/prop combination.

Based on the above data, the 11x7E prop offers the best performance within the limitations of the motor and ESC