

## Scorpion SII-2215-1810 Motor Propeller Data

Motor Wind 9-Turn Delta		Motor Kv 1810 RPM/Volt		No-Load Current I <sub>o</sub> = 1.35 Amps @ 10v		Motor Resistance R <sub>m</sub> = 0.031 Ohms		I Max 25 Amps	P Max (3S) 275 W
Outside Diameter 27.9 mm, 1.098in.		Body Length 33.0 mm, 1.299 in.		Total Shaft Length 52.0 mm, 2.047 in.		Shaft Diameter 2.98 mm, 0.117 in.		Motor Weight 68.8 gm, 2.43 oz	
Prop Manf.	Prop Size	Input Voltage	Motor Amps	Watts Input	Prop RPM	Pitch Speed	Thrust Grams	Thrust Ounces	Thrust Eff. Grams/W
APC	6x5.5-E	7.4	11.74	86.9	12,068	62.9	323.6	11.41	3.72
APC	7x4-E	7.4	13.71	101.4	11,749	44.5	562.9	19.86	5.55
APC	7x4-SF	7.4	14.04	103.9	11,690	44.3	545.1	19.23	5.25
APC	7x5-E	7.4	17.19	127.2	11,196	53.0	571	20.14	4.49
APC	7x5-SF	7.4	17.03	126.1	11,218	53.1	587.8	20.73	4.66
APC	7x6-E	7.4	18.06	133.7	11,053	62.8	614	21.66	4.59
APC	7x6-SF	7.4	20.24	149.8	10,711	60.9	566.6	19.99	3.78
APC	8x3.8-SF	7.4	22.13	163.7	10,444	37.6	821.9	28.99	5.02
APC	8x4-E	7.4	19.31	142.9	10,842	41.1	747.6	26.37	5.23
APC	8x6-E	7.4	26.22	194.0	9,812	55.8	816.4	28.80	4.21
APC	9x3.8-SF	7.4	28.01	207.3	9,488	34.1	1008	35.56	4.86
APC	9x4.5-E	7.4	25.86	191.3	9,865	42.0	985.5	34.76	5.15
GEM	8x4.5	7.4	25.71	190.3	9,873	42.1	903.6	31.87	4.75
GEM	8x4.5-C	7.4	24.69	182.7	9,569	40.8	876.5	30.92	4.80
GEM	9x4.7-C	7.4	27.20	201.3	9,160	40.8	1000.3	35.28	4.97
GWS	7x3.5-DD	7.4	8.44	62.5	12,594	41.7	403.7	14.24	6.46
GWS	7x3.5x3-DD	7.4	10.74	79.5	12,225	40.5	474	16.72	5.96
GWS	8x4-DD	7.4	15.69	116.1	11,429	43.3	695	24.52	5.98
GWS	8x4x3-DD	7.4	18.74	138.7	10,938	41.4	760.1	26.81	5.48
GWS	8x4.3-SF	7.4	20.13	149.0	10,699	43.6	756.8	26.70	5.08
GWS	9x5-DD	7.4	25.19	186.4	9,964	47.2	990.7	34.95	5.31
MAS	7x4x3	7.4	15.45	114.3	11,471	43.5	542.4	19.13	4.75
MAS	8x6x3	7.4	27.04	200.1	9,686	55.0	837.5	29.54	4.19
APC	4.75x5.5-E	11.1	12.35	137.0	15,951	83.1	294.1	10.37	2.15
APC	5.25x4.75-E	11.1	14.36	159.4	17,939	80.7	476.2	16.80	2.99
APC	5.5x4.5-E	11.1	14.59	162.0	17,863	76.1	484.5	17.09	2.99
APC	5x5-E	11.1	12.71	141.1	18,222	86.3	333.3	11.76	2.36
APC	6x4-E	11.1	16.39	181.9	17,546	66.5	685.9	24.19	3.77
APC	6x5.5-E	11.1	20.91	232.1	16,705	87.0	632.7	22.32	2.73
APC	7x4-E	11.1	25.64	284.6	15,842	60.0	1091.8	38.51	3.84

### Propeller Chart Color Code Explanation

- The prop is too small to get good performance from the motor. (Less than 50% power)
- The prop is sized right to get good power from the motor. (50 to 80% power)
- The prop can be used, but full throttle should be kept to short bursts. (80 to 100% power)
- The prop is too big for the motor and should not be used. (Over 100% power)

#### PLEASE NOTE:

The data contained in this prop chart is based on actual measurements taken in a controlled test environment. The test voltages used are based on a properly sized Li-Po battery for the current draw of the motor being tested. If you are using a larger than normal capacity battery, or a very high C-Rated battery, your actual voltages will be higher than those shown in this chart, and this will result in higher current draw for each prop used. You should always test your power system with a watt meter whenever a prop is used to ensure that you are not exceeding the recommended rating of the motor being used. The prop recommendations in this chart are based on the motor receiving adequate cooling throughout its operation. If your motor is being used inside a cowl, you must provide adequate cooling to the motor and make sure that the motor is not getting too hot during operation.