

Vertiq 23-06 2200Kv Thrust Data



DAL5045 18V

Philadelphia, PA USA | Altitude: 15m

Commanded Voltage (V)	Supply Voltage (V)	Supply Current (A)	Input Power (W)	Speed (RPM)	Torque (Nmm)	Motor-Controller Efficiency (%)	Thrust (g)	Propulsion Efficiency (g / W)
1.0	17.8	0.1	1	2103	0.51	12.7%	5	5.8
2.0	17.8	0.2	3	4239	2.10	29.7%	22	6.9
3.0	17.8	0.4	7	6340	4.82	43.7%	50	6.8
4.0	17.8	0.8	14	8425	8.65	54.1%	89	6.3
5.0	17.8	1.4	24	10464	13.53	61.7%	141	5.9
6.0	17.8	2.1	37	12426	18.98	66.2%	202	5.4
7.0	17.7	3.1	54	14333	25.26	69.6%	271	5.0
8.0	17.7	4.3	75	16183	31.83	71.6%	345	4.6
9.0	17.7	5.7	101	17966	39.01	73.0%	424	4.2
10.0	17.6	7.4	131	19674	46.87	74.0%	512	3.9
11.0	17.6	9.3	164	21276	54.88	74.5%	600	3.7
12.0	17.6	11.4	201	22852	62.82	74.9%	687	3.4
13.0	17.5	13.9	244	24349	71.69	75.0%	784	3.2
14.0	17.4	16.8	293	25884	81.24	75.1%	889	3.0
15.0	17.4	20.1	348	27358	90.63	74.6%	995	2.9

APC5x3E 18V

Philadelphia, PA USA | Altitude: 15m

Commanded Voltage (V)	Supply Voltage (V)	Supply Current (A)	Input Power (W)	Speed (RPM)	Torque (Nmm)	Motor-Controller Efficiency (%)	Thrust (g)	Propulsion Efficiency (g / W)
1.0	17.8	0.1	1	2109	0.31	7.1%	3	2.9
2.0	17.8	0.2	3	4263	1.36	20.8%	13	4.4
3.0	17.8	0.4	6	6421	3.06	33.0%	32	5.1
4.0	17.8	0.6	11	8549	5.71	45.2%	57	5.1
5.0	17.8	1.0	18	10663	8.48	52.8%	92	5.1
6.0	17.8	1.5	27	12713	11.94	59.1%	133	4.9
7.0	17.8	2.2	39	14702	16.03	63.8%	180	4.7
8.0	17.7	3.0	53	16633	20.56	67.0%	234	4.4
9.0	17.7	4.1	72	18525	25.85	69.5%	294	4.1
10.0	17.7	5.3	94	20290	31.31	71.1%	355	3.8
11.0	17.7	6.8	119	21961	37.70	72.7%	423	3.5
12.0	17.6	8.4	148	23596	43.98	73.2%	486	3.3
13.0	17.6	10.4	184	25105	51.72	74.1%	553	3.0
14.0	17.5	12.9	226	26619	60.17	74.4%	620	2.7
15.0	17.5	15.6	273	28097	68.53	73.9%	681	2.5
16.0	17.4	19.2	333	29772	79.58	74.4%	759	2.3

Vertiq 23-06 2200Kv Thrust Data



APC5x4R 18V

Philadelphia, PA USA | Altitude: 15m

Commanded Voltage (V)	Supply Voltage (V)	Supply Current (A)	Input Power (W)	Speed (RPM)	Torque (Nmm)	Motor-Controller Efficiency (%)	Thrust (g)	Propulsion Efficiency (g / W)
1.0	17.8	0.1	1	2105	0.45	9.7%	4	4.0
2.0	17.8	0.2	3	4244	1.90	26.8%	16	5.0
3.0	17.8	0.4	7	6378	4.30	40.2%	35	4.9
4.0	17.8	0.8	14	8466	8.06	52.7%	61	4.5
5.0	17.8	1.3	23	10495	12.45	60.3%	94	4.2
6.0	17.8	2.0	36	12461	17.96	65.8%	135	3.8
7.0	17.7	3.0	53	14376	24.28	69.0%	182	3.4
8.0	17.7	4.3	76	16195	31.87	71.4%	237	3.1
9.0	17.7	5.8	103	17970	39.93	72.8%	294	2.8
10.0	17.6	7.7	136	19672	48.97	74.1%	354	2.6
11.0	17.6	10.0	176	21211	59.22	74.9%	418	2.4
12.0	17.5	12.5	219	22665	69.16	74.9%	480	2.2
13.0	17.5	15.5	270	24055	80.37	74.9%	546	2.0
14.0	17.4	18.7	326	25513	90.35	74.1%	608	1.9

APC6x3R 18V

Philadelphia, PA USA | Altitude: 15m

Commanded Voltage (V)	Supply Voltage (V)	Supply Current (A)	Input Power (W)	Speed (RPM)	Torque (Nmm)	Motor-Controller Efficiency (%)	Thrust (g)	Propulsion Efficiency (g / W)
1.0	17.8	0.1	1	2091	0.57	12.1%	5	4.9
2.0	17.8	0.2	3	4212	2.21	29.4%	20	6.1
3.0	17.8	0.4	8	6340	5.04	43.2%	46	5.9
4.0	17.8	0.8	15	8396	9.47	56.2%	81	5.5
5.0	17.8	1.4	25	10421	14.76	63.9%	128	5.1
6.0	17.8	2.2	40	12333	21.06	68.4%	183	4.6
7.0	17.7	3.4	61	14215	29.17	71.3%	250	4.1
8.0	17.7	4.9	88	15989	38.61	73.8%	323	3.7
9.0	17.7	6.9	121	17644	49.29	75.0%	401	3.3
10.0	17.6	9.4	165	19229	61.84	75.6%	489	3.0
11.0	17.5	12.1	213	20645	74.61	75.7%	571	2.7
12.0	17.5	15.4	270	21951	88.58	75.5%	656	2.4

Vertiq 23-06 2200Kv Thrust Data



APC6x4E 18V

Philadelphia, PA USA | Altitude: 15m

Commanded Voltage (V)	Supply Voltage (V)	Supply Current (A)	Input Power (W)	Speed (RPM)	Torque (Nmm)	Motor-Controller Efficiency (%)	Thrust (g)	Propulsion Efficiency (g / W)
1.0	17.8	0.1	1	2083	1.02	19.2%	8	6.5
2.0	17.8	0.2	4	4170	4.07	40.9%	32	7.3
3.0	17.8	0.6	11	6248	9.31	54.6%	72	6.5
4.0	17.8	1.2	22	8212	16.82	65.6%	125	5.7
5.0	17.8	2.2	39	10147	25.62	70.1%	196	5.1
6.0	17.7	3.5	62	11958	35.91	72.5%	281	4.5
7.0	17.7	5.2	92	13732	47.28	73.5%	374	4.0
8.0	17.7	7.5	132	15395	60.88	74.2%	473	3.6
9.0	17.6	10.2	179	16939	74.87	74.0%	572	3.2
10.0	17.5	13.5	237	18357	90.53	73.5%	679	2.9
11.0	17.4	17.1	299	19636	105.32	72.4%	776	2.6
12.0	17.5	12.5	219	22665	69.16	74.9%	480	2.2

Published data is rated for continuous thrust at Normal Temperature and Pressure.
Performance is degraded at higher temperatures and lower pressures.
Performance may exceed published data temporarily, but cannot be sustained continuously.



Vertiq 81-08 150Kv Thrust Data



APC 17x7E 48V

Philadelphia PA USA | Altitude:15m | Date: 2021-11-17

Commanded Voltage (V)	Supply Voltage (V)	Supply Current (A)	Input Power (W)	Speed (RPM)	Torque (Nmm)	Motor-Controller Efficiency (%)	Thrust (g)	Propulsion Efficiency (g / W)
2.0	48.3	0.0	0	260	0.00	8.6%	0	0.00
4.0	48.3	0.0	2	530	0.01	16.7%	10	5.40
6.0	48.3	0.1	4	800	0.01	26.4%	40	9.36
8.0	48.3	0.2	8	1070	0.02	34.3%	80	10.27
10.0	48.3	0.3	13	1340	0.04	41.7%	140	11.14
12.0	48.3	0.4	19	1610	0.05	47.1%	200	10.64
14.0	48.3	0.5	27	1880	0.07	51.9%	290	10.93
16.0	48.3	0.7	36	2150	0.09	56.6%	380	10.50
18.0	48.3	1.0	48	2410	0.11	60.5%	500	10.44
20.0	48.2	1.3	62	2670	0.14	64.1%	620	9.99
22.0	48.2	1.6	78	2940	0.17	67.2%	750	9.64
24.0	48.2	2.0	96	3190	0.20	69.5%	900	9.37
26.0	48.2	2.4	118	3440	0.23	71.7%	1060	9.00
28.0	48.1	3.0	143	3680	0.27	73.5%	1250	8.74
30.0	48.1	3.5	169	3920	0.31	74.8%	1410	8.35
32.0	48.0	4.1	199	4160	0.35	76.0%	1600	8.04
34.0	48.0	4.9	234	4390	0.39	77.2%	1810	7.75
36.0	48.0	5.6	269	4610	0.43	77.6%	2000	7.45
38.0	47.9	6.5	310	4840	0.48	78.5%	2220	7.17
40.0	47.9	7.3	351	5060	0.52	79.0%	2430	6.92
42.0	47.8	8.4	402	5290	0.58	79.8%	2690	6.69
44.0	47.7	9.5	453	5510	0.63	80.1%	2920	6.44
46.0	47.7	10.7	510	5720	0.68	80.3%	3170	6.22
48.0	47.6	11.2	536	5810	0.71	80.8%	3290	6.14

Vertiq 81-08 150Kv Thrust Data



P 21x6.3R 48V

Philadelphia PA USA | Altitude:15m

Commanded Voltage (V)	Supply Voltage (V)	Supply Current (A)	Input Power (W)	Speed (RPM)	Torque (Nmm)	Motor-Controller Efficiency (%)	Thrust (g)	Propulsion Efficiency (g / W)
2.0	48.3	0.0	0	260	0.00	8.6%	0	0.00
4.0	48.3	0.0	2	530	0.01	16.7%	10	5.40
6.0	48.3	0.1	4	800	0.01	26.4%	40	9.36
8.0	48.3	0.2	8	1070	0.02	34.3%	80	10.27
10.0	48.3	0.3	13	1340	0.04	41.7%	140	11.14
12.0	48.3	0.4	19	1610	0.05	47.1%	200	10.64
14.0	48.3	0.5	27	1880	0.07	51.9%	290	10.93
16.0	48.3	0.7	36	2150	0.09	56.6%	380	10.50
18.0	48.3	1.0	48	2410	0.11	60.5%	500	10.44
20.0	48.2	1.3	62	2670	0.14	64.1%	620	9.99
22.0	48.2	1.6	78	2940	0.17	67.2%	750	9.64
24.0	48.2	2.0	96	3190	0.20	69.5%	900	9.37
26.0	48.2	2.4	118	3440	0.23	71.7%	1060	9.00
28.0	48.1	3.0	143	3680	0.27	73.5%	1250	8.74
30.0	48.1	3.5	169	3920	0.31	74.8%	1410	8.35
32.0	48.0	4.1	199	4160	0.35	76.0%	1600	8.04
34.0	48.0	4.9	234	4390	0.39	77.2%	1810	7.75
36.0	48.0	5.6	269	4610	0.43	77.6%	2000	7.45
38.0	47.9	6.5	310	4840	0.48	78.5%	2220	7.17
40.0	47.9	7.3	351	5060	0.52	79.0%	2430	6.92
42.0	47.8	8.4	402	5290	0.58	79.8%	2690	6.69
44.0	47.7	9.5	453	5510	0.63	80.1%	2920	6.44
46.0	47.7	10.7	510	5720	0.68	80.3%	3170	6.22
48.0	47.6	11.2	536	5810	0.71	80.8%	3290	6.14

Vertiq 81-08 150Kv Thrust Data



P22x6.6R - 48V

Philadelphia PA USA | Altitude:15m

Commanded Voltage (V)	Supply Voltage (V)	Supply Current (A)	Input Power (W)	Speed (RPM)	Torque (Nmm)	Motor-Controller Efficiency (%)	Thrust (g)	Propulsion Efficiency (g / W)
2.0	48.4	0.0	0	260	0.00	29.2	20	48.8
4.0	48.4	0.0	2	520	0.02	35.9	50	21.9
6.0	48.3	0.1	6	780	0.03	47.2	120	21.0
8.0	48.3	0.2	11	1040	0.06	55.4	200	17.8
10.0	48.3	0.4	20	1300	0.09	62.6	310	15.8
12.0	48.3	0.6	31	1550	0.13	68.1	460	14.7
14.0	48.3	1.0	47	1810	0.18	73.4	660	13.9
16.0	48.3	1.4	68	2060	0.24	76.1	870	12.8
18.0	48.2	1.9	93	2320	0.31	79.5	1120	12.0
20.0	48.2	2.6	126	2570	0.38	81.3	1400	11.1
22.0	48.2	3.4	165	2820	0.46	82.9	1720	10.4
24.0	48.1	4.3	208	3060	0.55	83.8	2040	9.8
26.0	48.0	5.4	261	3310	0.64	85.3	2430	9.3
28.0	48.0	6.7	321	3540	0.74	85.8	2820	8.8
30.0	47.9	8.1	388	3780	0.85	86.3	3230	8.3
32.0	47.8	9.7	465	4000	0.96	86.6	3680	7.9
34.0	47.7	11.6	552	4230	1.08	86.8	4150	7.5
36.0	47.6	13.5	644	4450	1.20	86.9	4610	7.2
38.0	47.5	15.7	744	4670	1.33	87.1	5100	6.9
40.0	47.4	17.9	847	4870	1.44	86.7	5560	6.6
42.0	47.2	20.2	953	5050	1.56	86.3	6010	6.3
44.0	47.1	23.0	1081	5230	1.69	85.8	6510	6.0
46.0	46.8	25.7	1202	5400	1.81	85.0	6950	5.8
48.0	46.8	26.4	1233	5440	1.83	84.7	7020	5.7

Vertiq 81-08 150Kv Thrust Data



P24x7.2R - 48V

Philadelphia PA USA | Altitude:15m

Commanded Voltage (V)	Supply Voltage (V)	Supply Current (A)	Input Power (W)	Speed (RPM)	Torque (Nmm)	Motor-Controller Efficiency (%)	Thrust (g)	Propulsion Efficiency (g / W)
2.0	48.4	0.0	1	250	0.01	27.3%	20	36.0
4.0	48.4	0.1	3	500	0.02	41.4%	70	24.5
6.0	48.3	0.2	7	750	0.05	51.7%	160	21.9
8.0	48.3	0.3	15	1000	0.08	59.8%	290	19.7
10.0	48.3	0.5	26	1260	0.13	68.2%	470	18.0
12.0	48.3	0.9	43	1500	0.20	72.7%	690	16.2
14.0	48.3	1.4	66	1760	0.28	76.4%	980	14.8
16.0	48.2	2.0	96	2000	0.36	79.5%	1300	13.6
18.0	48.2	2.8	133	2250	0.46	81.6%	1670	12.6
20.0	48.1	3.8	181	2510	0.57	83.2%	2090	11.6
22.0	48.1	4.9	235	2750	0.69	84.7%	2540	10.8
24.0	48.0	6.3	301	2990	0.82	85.4%	3020	10.0
26.0	47.9	7.8	374	3230	0.95	86.0%	3500	9.4
28.0	47.8	9.8	468	3460	1.11	86.3%	4100	8.8
30.0	47.7	11.8	565	3690	1.26	86.4%	4650	8.2
32.0	47.6	14.0	666	3900	1.41	86.2%	5200	7.8
34.0	47.4	16.4	778	4090	1.56	85.7%	5740	7.4
36.0	47.3	19.0	897	4280	1.70	85.2%	6300	7.0
38.0	47.1	21.7	1022	4450	1.85	84.3%	6840	6.7
40.0	46.9	24.8	1162	4620	2.00	83.3%	7410	6.4
42.0	46.7	28.1	1310	4780	2.15	82.2%	7930	6.1
44.0	46.4	31.6	1465	4940	2.29	80.7%	8470	5.8
46.0	43.1	31.8	1371	4850	2.20	81.4%	8120	5.9
48.0	42.9	31.8	1364	4830	2.19	81.4%	8130	6.0

Vertiq 81-08 150Kv Thrust Data



G26x8.5R - 48V

Philadelphia PA USA | Altitude:15m

Commanded Voltage (V)	Supply Voltage (V)	Supply Current (A)	Input Power (W)	Speed (RPM)	Torque (Nmm)	Motor-Controller Efficiency (%)	Thrust (g)	Propulsion Efficiency (g / W)
2.0	48.4	0.0	1	240	0.01	25.2%	20	24.5
4.0	48.4	0.1	4	500	0.04	50.6%	100	25.8
6.0	48.4	0.2	10	750	0.09	65.1%	240	23.1
8.0	48.4	0.5	22	1000	0.15	72.3%	450	20.2
10.0	48.4	0.8	41	1250	0.24	76.5%	710	17.5
12.0	48.4	1.4	66	1500	0.33	79.5%	1020	15.5
14.0	48.3	2.1	100	1740	0.45	81.5%	1390	13.9
16.0	48.3	3.0	144	1990	0.58	83.3%	1810	12.6
18.0	48.2	4.2	203	2230	0.73	84.3%	2320	11.4
20.0	48.1	5.6	270	2470	0.89	84.8%	2830	10.5
22.0	48.0	7.4	354	2700	1.06	84.9%	3410	9.6
24.0	47.9	9.4	449	2920	1.24	84.7%	4010	8.9
26.0	47.7	11.7	559	3130	1.44	84.2%	4660	8.3
28.0	47.6	14.2	678	3330	1.62	83.5%	5270	7.8
30.0	47.4	17.1	810	3520	1.81	82.6%	5910	7.3
32.0	47.2	20.1	948	3690	2.00	81.4%	6480	6.8
34.0	47.0	23.4	1102	3850	2.18	79.8%	7100	6.4
36.0	46.6	27.4	1279	3990	2.37	77.5%	7700	6.0

Vertiq 81-08 150Kv Thrust Data



G27x8.8R - 48V

Philadelphia PA USA | Altitude:15m

Commanded Voltage (V)	Supply Voltage (V)	Supply Current (A)	Input Power (W)	Speed (RPM)	Torque (Nmm)	Motor-Controller Efficiency (%)	Thrust (g)	Propulsion Efficiency (g / W)
2.0	48.3	0.0	1	260	0.01	17.9%	50	34.8
4.0	48.3	0.1	5	520	0.05	50.7%	150	29.8
6.0	48.3	0.3	13	760	0.11	64.3%	310	23.7
8.0	48.3	0.6	27	1010	0.19	72.4%	540	20.0
10.0	48.2	1.0	48	1260	0.28	77.4%	850	17.7
12.0	48.2	1.6	79	1510	0.40	80.4%	1220	15.5
14.0	48.1	2.5	119	1750	0.53	81.9%	1650	13.8
16.0	48.1	3.6	174	2000	0.69	83.5%	2150	12.4
18.0	48.0	5.0	239	2240	0.86	84.2%	2680	11.2
20.0	47.9	6.7	322	2470	1.05	84.3%	3280	10.2
22.0	47.8	8.7	414	2680	1.24	83.8%	3870	9.4
24.0	47.6	11.0	525	2890	1.45	83.4%	4540	8.7
26.0	47.5	13.5	639	3090	1.63	82.8%	5140	8.0
28.0	47.3	16.3	771	3270	1.84	81.8%	5790	7.5
30.0	47.1	19.4	912	3430	2.04	80.6%	6440	7.1
32.0	46.8	22.7	1063	3590	2.25	79.4%	7070	6.7
34.0	46.5	26.2	1218	3750	2.44	78.5%	7640	6.3
36.0	46.1	30.0	1384	3880	2.65	77.9%	8390	6.1

Vertiq 81-08 150Kv Thrust Data



G28x9.2R - 48V

Philadelphia PA USA | Altitude:15m

Commanded Voltage (V)	Supply Voltage (V)	Supply Current (A)	Input Power (W)	Speed (RPM)	Torque (Nmm)	Motor-Controller Efficiency (%)	Thrust (g)	Propulsion Efficiency (g / W)
2.0	48.3	0.1	2	260	0.02	19.2%	30	12.1
4.0	48.3	0.1	6	520	0.06	48.6%	130	20.8
6.0	48.3	0.3	15	760	0.12	64.8%	310	21.0
8.0	48.3	0.6	30	1010	0.21	73.7%	560	18.6
10.0	48.2	1.1	55	1260	0.33	78.8%	930	16.8
12.0	48.2	1.9	91	1510	0.47	81.7%	1340	14.8
14.0	48.1	2.9	141	1750	0.64	82.9%	1870	13.2
16.0	48.0	4.3	205	1990	0.82	83.8%	2440	11.9
18.0	47.9	5.9	283	2220	1.02	83.8%	3050	10.8
20.0	47.8	8.0	381	2440	1.24	83.4%	3740	9.8
22.0	47.7	10.3	490	2650	1.46	82.9%	4420	9.0
24.0	47.5	12.7	606	2830	1.67	81.7%	5060	8.4
26.0	47.4	15.6	737	3010	1.89	80.6%	5710	7.7
28.0	47.2	18.7	882	3170	2.10	79.1%	6360	7.2
30.0	47.0	22.1	1036	3330	2.31	77.8%	6990	6.7
32.0	46.6	25.9	1206	3480	2.53	76.4%	7670	6.4
34.0	46.2	29.8	1377	3610	2.75	75.6%	8330	6.0

Vertiq 81-08 150Kv Thrust Data



NS30x10R - 24V

Philadelphia PA USA | Altitude:15m

Commanded Voltage (V)	Supply Voltage (V)	Supply Current (A)	Input Power (W)	Speed (RPM)	Torque (Nmm)	Motor-Controller Efficiency (%)	Thrust (g)	Propulsion Efficiency (g / W)
2.0	24.1	0.0	1	260	0.02	46.6%	50	43.1
4.0	24.1	0.2	6	510	0.08	69.5%	200	33.8
6.0	24.1	0.7	18	760	0.17	79.0%	460	26.1
8.0	24.0	1.7	40	1010	0.31	83.1%	840	21.1
10.0	24.0	3.2	76	1260	0.49	84.7%	1330	17.5
12.0	23.8	5.4	128	1500	0.69	85.3%	1890	14.8
14.0	23.7	8.3	196	1730	0.92	85.0%	2550	13.0
16.0	23.4	12.2	287	1960	1.18	84.6%	3260	11.4
18.0	23.2	17.0	395	2170	1.45	83.7%	4050	10.3
20.0	22.8	22.7	518	2360	1.73	82.5%	4820	9.3
22.0	22.3	28.8	642	2520	1.97	80.9%	5500	8.6
24.0	22.3	29.0	647	2510	1.98	80.5%	5530	8.5

Published data is rated for continuous thrust at Normal Temperature and Pressure.
 Performance is degraded at higher temperatures and lower pressures.
 Performance may exceed published data temporarily, but cannot be sustained continuously.

