

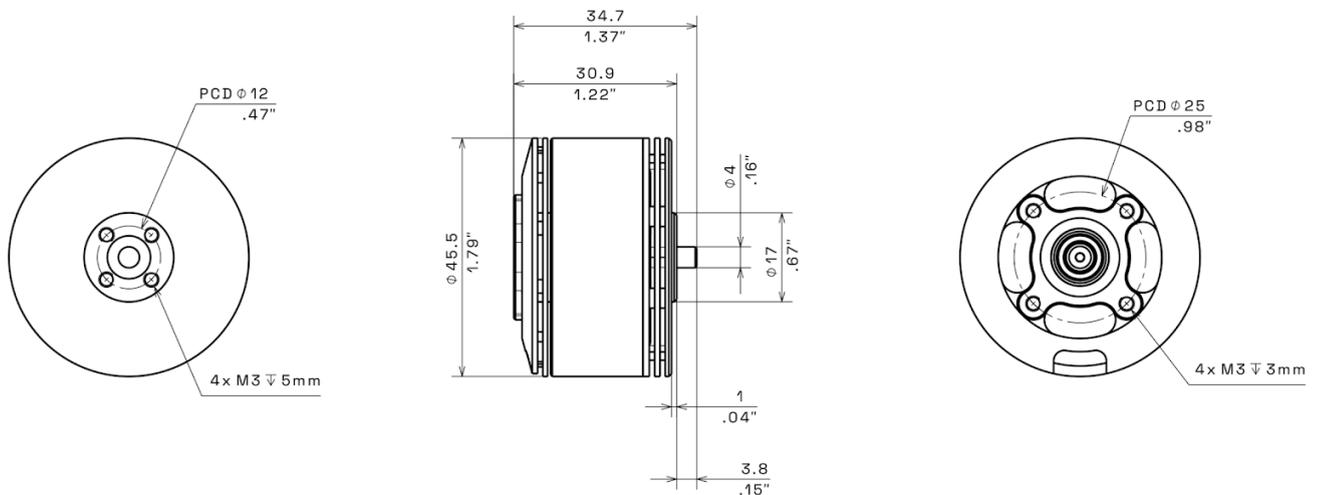
# 4015 PRO

## 510 KV

### MOTOR SPECIFICATIONS

Kv (Motor Velocity Constant)	510 RPM/V
Kt (Motor Torque Constant)	0.0235 Nm/A @ 6716 RPM
Maximum Continuous Current*	25A (180s)
Maximum Continuous Power*	600W (180s)
Power Density	4.15 W/g (Rated), 6.14 W/g (Maximum)
Voltage Range	22V - 25V ( 6S LiPo)
I <sub>o</sub> (24@V)	2.8A (24@V)
Inductance per phase (Winding Inductance)	0.018 [ ≈0.03 ] mH
R <sub>ph</sub> (Wind Resistance per phase)	0.04 [ ≈0.03 ] Ω
Stator Poles	18S
Magnetic Poles	24P
Bearings	Triple 619/4-2RS Sealed
Stick Out Shaft Diameter	∅ 3.8 mm
Motor Diameter	∅ 45.5 mm
Motor Length	30.9 mm
Motor Weight	165 g ± 2 g
Mount Pattern @ 90 deg	4 X M3 @ PCD ∅ 25 mm ↓ 3 mm
Compatible Propeller Size	14 " inch to 18 " inch
Propeller Mount Pattern	4 X M3 @ PCD ∅ 12 mm ↓ 5 mm

### 2D CAD



Note: Specifications and drawings may be revised without notice. Vector Technics assumes no liability for reliance on unverified data.  
All Dimensions in millimeters [mm]

## 4015 PRO 510 KV - TEST DATA

**Note:** The test data provided below is subject to environmental and testing conditions, including but not limited to temperature, humidity, altitude, and the equipment used. Results may vary depending on specific testing parameters and conditions.

<b>Propeller</b>	SR 16 X 5.4 CF_FX			<b>Power Supply / Battery</b>	TB - 22000 mAh 6S	
<b>ESC</b>	TM 60A 6S FLAME			<b>Environmental Temp:</b>	30 ° C	<b>Cross-winds:</b> Mild
<b>Test Date:</b>	22-01-2025	<b>Humidity:</b>	24 %			

PWM - Throttle%	Voltage	Current (A)	RPM	Thrust (g)	Torque (N*m)	Electrical Power (W)	Efficiency	Temp (Celcius)
1300 - 30	24.6	3.4	3375	662	0.14	83.6	7.9	52 ° C [@70% 10 min Constant]
1400 - 40	24.4	6.4	4318	1116	0.22	156.2	7.1	
1500 - 50	24.3	10.4	5195	1650	0.31	252.7	6.5	
1600 - 60	24	15.6	6000	2164	0.41	374.4	5.8	
1700 - 70	23.8	21.7	6716	2693	0.51	516.5	5.2	
1800 - 80	23.5	29.2	7399	3310	0.62	686.2	4.8	56 ° C [Maximum]
1900 - 90	23.1	37.8	7956	3881	0.73	873.2	4.4	
1950 - 95	22.9	43.9	8367	4249	0.79	1005.3	4.2	
2000 - 100	22.9	44.3	8338	4341	0.81	1014.5	4.3	

<b>Propeller</b>	Tri Gemfan 1070 EP_FX			<b>Power Supply / Battery</b>	TB - 22000 mAh 6S	
<b>ESC</b>	TM 60A 6S FLAME			<b>Environmental Temp:</b>	36° C	<b>Cross-winds:</b> Mild
<b>Test Date:</b>	21-05-2025	<b>Humidity:</b>	38%			

PWM - Throttle%	Voltage	Current (A)	RPM	Thrust (g)	Torque (N*m)	Electrical Power (W)	Efficiency	Temp (Celcius)
1300 - 30	24.6	1.8	3811	252	0.05	44.3	5.7	53 ° C [@70% 10 min Constant]
1400 - 40	24.6	3.6	4968	439	0.09	88.6	5.0	
1500 - 50	24.5	5.9	6014	673	0.13	144.6	4.7	
1600 - 60	24.3	8.7	6982	936	0.18	211.4	4.4	
1700 - 70	24.2	12.3	7910	1214	0.24	297.7	4.1	
1800 - 80	24	16.7	8809	1505	0.3	400.8	3.8	55 ° C [Maximum]
1900 - 90	23.7	21.8	9635	1818	0.36	516.7	3.5	
1950 - 95	23.6	25.7	10150	2031	0.41	606.5	3.3	
2000 - 100	23.6	25.6	10144	2029	0.4	604.2	3.4	

<b>Propeller</b>	Tri Gemfan 1050 EP_FX			<b>Power Supply / Battery</b>	TB - 22000 mAh 6S	
<b>ESC</b>	TM 60A 6S FLAME			<b>Environmental Temp:</b>	36° C	<b>Cross-winds:</b> Mild
<b>Test Date:</b>	21-05-2025	<b>Humidity:</b>	38%			

PWM - Throttle%	Voltage	Current (A)	RPM	Thrust (g)	Torque (N*m)	Electrical Power (W)	Efficiency	Temp (Celcius)
1300 - 30	24.7	1.6	3906	204	0.04	39.5	5.2	54 ° C [@70% 10 min Constant]
1400 - 40	24.7	3.1	5122	374	0.07	76.6	4.9	
1500 - 50	24.6	5	6268	591	0.11	123.0	4.8	
1600 - 60	24.5	7.5	7399	833	0.15	183.8	4.5	
1700 - 70	24.4	10.2	8302	1092	0.19	248.9	4.4	
1800 - 80	24.2	13.6	9255	1375	0.23	329.1	4.2	57 ° C [Maximum]
1900 - 90	24	17.9	10170	1699	0.29	429.6	4.0	
1950 - 95	23.9	21.2	10802	1938	0.33	506.7	3.8	
2000 - 100	23.9	21.3	10794	1952	0.33	509.1	3.8	

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# 4015 PRO 510 KV - TEST DATA

**Note:** The test data provided below is subject to environmental and testing conditions, including but not limited to temperature, humidity, altitude, and the equipment used. Results may vary depending on specific testing parameters and conditions.

<b>Propeller</b>	Tri Gemfan 1070 EP_FX			<b>Power Supply / Battery</b>	2 X TB - 22000 mAh 6S		
<b>ESC</b>	TM 60A 12S FLAME			<b>Environmental Temp:</b>	36° C		
<b>Test Date:</b>	21-05-2025	<b>Humidity:</b>	38%	<b>Cross-winds:</b> Mild			

PWM - Throttle%	Voltage	Current (A)	RPM	Thrust (g)	Torque (N*m)	Electrical Power (W)	Efficiency	Temp (Celcius)
1300 - 30	48.8	4.9	7259	864	0.15	114.0	3.6	90 ° C [@70% 10 min Constant]
1400 - 40	48.5	8.7	9277	1493	0.26	252.5	3.5	
1500 - 45	48	10.7	10245	1838	0.3	321.7	3.6	
1600 - 50	48.1	13.4	11002	2174	0.37	426.1	3.4	
1700 - 55	47.9	16.3	11797	2543	0.44	543.3	3.3	
1800 - 60	47.6	19.4	12537	2903	0.5	656.1	3.1	
1900 - 65	47.3	23.3	13355	3382	0.57	796.8	3.1	100 + ° C [Maximum]
1950 - 70	46.9	27.5	14056	3785	0.65	956.3	2.9	
2000 - 75	46.6	31.6	14772	4121	0.71	1097.8	2.8	

<b>Propeller</b>	Tri Gemfan 1050 EP_FX			<b>Power Supply / Battery</b>	2 X TB - 22000 mAh 6S		
<b>ESC</b>	TM 60A 12S FLAME			<b>Environmental Temp:</b>	36° C		
<b>Test Date:</b>	21-05-2025	<b>Humidity:</b>	38%	<b>Cross-winds:</b> Mild			

PWM - Throttle%	Voltage	Current (A)	RPM	Thrust (g)	Torque (N*m)	Electrical Power (W)	Efficiency	Temp (Celcius)
1300 - 30	49.7	5.6	7157	968	0.19	278.3	3.5	90 ° C [@70% 10 min Constant]
1400 - 40	49.4	10.1	8982	1580	0.32	498.9	3.2	
1500 - 45	49.2	12.8	9859	1898	0.38	629.8	3.0	
1600 - 50	48.9	16	10689	2238	0.45	782.4	2.9	
1700 - 55	48.6	19.3	11404	2503	0.52	938.0	2.7	
1800 - 60	48.3	23.4	12178	2869	0.6	1130.2	2.5	
1900 - 65	48	28.2	12862	3212	0.69	1353.6	2.4	100 + ° C [Maximum]
1950 - 70	47.6	33.3	13521	3447	0.77	1585.1	2.2	
2000 - 75	47.2	38.4	14137	3712	0.84	1812.5	2.0	

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