



## Brushless DC Motor 5008 IPE V3 170KV 240KV 300KV 340KV 400KV

### Our Product Introduction

#### Basic Information

- Place of Origin: Guangdong, China
- Model Number: 5008 IPE 170KV 240KV 300KV 340KV 400KV
- Price: Negotiable



#### Product Specification

- Motor Model: MAD 5008 IPE V3.0
- Motor Size: D:56 X 29.3 Mm
- Degree Of Protection: YES
- Propeller Mounting Holes: D:12 M3x4, D:15 M3x4
- Shaft Diameter: IN: 6 Mm
- Bearing: EZ0 696ZZ\*2
- Rotor Balance:  $\leq 5$  Mg
- Motor Mounting Holes:  $\leq 10$  Mg
- Disruptive Test: 500 V
- Highlight: Aerial Monitoring Tethered power Systems,  
Aerial Monitoring Power Tethered Drone  
Systems  
, Aluminum Alloy Tethered power Systems



#### More Images



## Brushless DC Motor 5008 IPE V3

5008 as the first motor was designed and developed by MAD EU in 2015, the result never let the motor designer and user disappointed. It is the most efficient motor equipped with 18-20inch propeller, the best option for the multirotor need 1-2kg/rotor. It is widely used for the long-range inspection drone mapping drone surveying drone quadcopter hexcopter multirotor.

**5008**  
ENERGY EFFICIENT 170KV  
INDUSTRY PROFESSIONAL EDITION

1.5~2.0 kgf

RECOMMENDED  
HOVER THRUST

4.8 kgf



MAXIMUM  
THRUST

MAXIMUM THRUST MAY DEPEND ON  
BATTERY LEVEL, PROPELLER TYPE,  
AIR PRESSURE AND OTHER CONDITIONS

OPTIMIZED  
WEIGHT 141 g

EFFICIENCY >81%



MAD 5008 IPE 170KV FLUXER PRO 18x6.1 MATT AMPX 40A (5-14S) HV

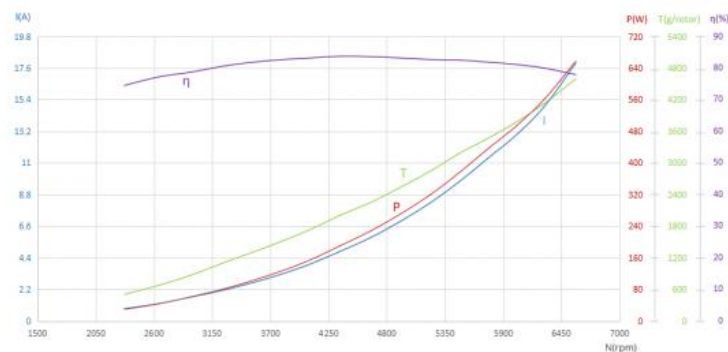
12S

MAX  
98°C

## Analytical Graph of Motor Operation

I - Current, P - Input Power,  $\eta$  - Electrical Efficiency, T - Thrust, N - Rotational Speed

The data above was measured with an input voltage of 48 V, at a temperature of 25°C and sea level. The rotational speed was adjusted by the throttle.

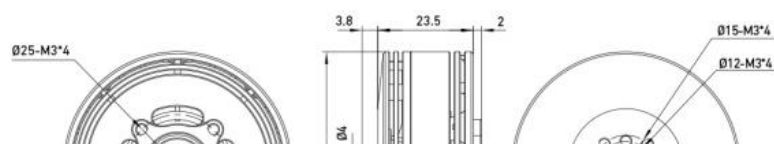


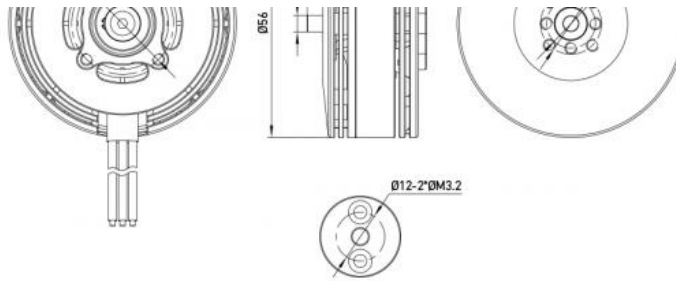
## Motor Data

|                              |  |                       |                                |
|------------------------------|--|-----------------------|--------------------------------|
| Motor Model                  | MAD 5008 IPE V3.0  | Number of pole pairs  | 14                             |
| Stator                       | TAIWAN / Anticorrosive   | Varnished wire Degree | 180°C                          |
| Motor Size                   | D:56 x 29.3 mm   | Magnet Degree         | 150°C                          |
| Degree of Protection         | IP45   | Cable Length          | 150 mm 16# Awg(Black) silicone |
| Centrifugal Heat Dissipation | YES  | Rotor Balance         | ≤5 mg                          |
| Propeller Mounting Holes     | D:12 M3*4, D:15 M3*4   | Motor Balance         | ≤10 mg                         |
| Shaft Diameter               | IN: 6 mm   | Motor Mounting Holes  | D:25 M3*4                      |
| Bearing                      | EZO 696ZZ*2  | Disruptive test       | 500 V                          |
| Additional Accessories       | Propeller Plate *1, Ø4-6 Adapter Ring *1, 3.5mm Bullet Connector*3, Heat Shrinkable Tube*3, M3*8mm *4 Motor Screws, M3*10mm *2 Propeller Screws, Sticker*2 |                       |                                |

## Specifications

|                     |   |                              |                          |
|---------------------|---|------------------------------|--------------------------|
| RPM/V               | 170 KV  | Nominal Voltage              | 12S lipo battery         |
| No Load Current     | 0.42A/20V   | Internal resistance          | 195mΩ                    |
| Motor Weight        | 141 g   | Product Boxed Weight         | 304g (110 x 110 x 50 mm) |
| Maximum Current     | 20.6 A  | Maximum Power                | 981W                     |
| Maximum thrust      | 4.8 kg  | Maximum Torque               | 1.09 Nm                  |
| Recommended ESC     | MAD AMPX 40A (5-14S) HV                                     | Recommended Propellers       | 17x5.8, 18x6.1, 18x5.7   |
| UAV take-off weight | 12S-18" 7kg-Quadcopter<br>10.5kg-Hexacopter 14kg-Octocopter | Single rotor take-off weight | 1.5kg ~ 2kg              |





| MAD 5008 IPE 170KV FLUXER PRO 17x5.8 MATT AMPX 40A (5-14S) HV |             |             |                 |                  |              |      |             | 12S            | MAX 80°C          |
|---|-------------|-------------|-----------------|------------------|--------------|------|-------------|----------------|-------------------|
| Throttle [%]  | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [gf] | Efficiency [%] | Efficiency [gf/W] |
| 30  | 47.97       | 0.73        | 34.8            | 23.6             | 0.096        | 2355 | 464         | 69.90          | 13.7              |
| 35  | 47.97       | 1.02        | 47.9            | 34.9             | 0.124        | 2686 | 607         | 74.40          | 12.9              |
| 40  | 47.96       | 1.37        | 64.9            | 48.3             | 0.154        | 2999 | 745         | 75.60          | 11.7              |
| 45  | 47.95       | 1.83        | 87.0            | 67.3             | 0.192        | 3355 | 952         | 78.80          | 11.1              |
| 50  | 47.94       | 2.46        | 117.2           | 93.0             | 0.237        | 3757 | 1192        | 80.80          | 10.4              |
| 55  | 47.93       | 3.21        | 153.2           | 124.7            | 0.289        | 4130 | 1448        | 83.00          | 9.6               |
| 60  | 47.92       | 4.02        | 191.8           | 157.8            | 0.338        | 4463 | 1702        | 83.80          | 9.0               |
| 65  | 47.9        | 4.81        | 229.7           | 190.3            | 0.380        | 4782 | 1886        | 84.30          | 8.4               |
| 70  | 47.88       | 5.73        | 274.0           | 226.4            | 0.426        | 5081 | 2100        | 84.10          | 7.8               |
| 75  | 47.86       | 6.84        | 326.8           | 271.9            | 0.483        | 5371 | 2338        | 84.70          | 7.3               |
| 80  | 47.84       | 8.02        | 383.3           | 318.6            | 0.539        | 5641 | 2681        | 84.60          | 7.1               |
| 85  | 47.82       | 9.33        | 445.7           | 369.7            | 0.593        | 5951 | 2961        | 84.40          | 6.8               |
| 90  | 47.8        | 10.81       | 516.4           | 426.0            | 0.652        | 6245 | 3255        | 83.80          | 6.4               |
| 95  | 47.76       | 12.54       | 598.4           | 487.4            | 0.714        | 6523 | 3485        | 82.70          | 5.9               |
| 100   | 47.72       | 14.89       | 709.7           | 571.4            | 0.795        | 6869 | 3850        | 81.70          | 5.5               |

| MAD 5008 IPE 170KV FLUXER PRO 18x6.1 MATT AMPX 40A (5-14S) HV |             |             |                 |                  |              |      |             | 12S            | MAX 98°C          |
|---|-------------|-------------|-----------------|------------------|--------------|------|-------------|----------------|-------------------|
| Throttle [%]  | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [gf] | Efficiency [%] | Efficiency [gf/W] |
| 30  | 47.96       | 0.84        | 39.9            | 29.0             | 0.119        | 2321 | 501         | 74.50          | 12.9              |
| 35  | 47.95       | 1.2         | 57.4            | 43.1             | 0.156        | 2647 | 675         | 77.20          | 12.1              |
| 40  | 47.95       | 1.65        | 78.9            | 60.6             | 0.197        | 2948 | 865         | 78.70          | 11.2              |
| 45  | 47.94       | 2.2         | 104.9           | 83.0             | 0.241        | 3292 | 1127        | 80.80          | 11.0              |
| 50  | 47.92       | 2.95        | 140.8           | 114.0            | 0.297        | 3673 | 1406        | 82.30          | 10.1              |
| 55  | 47.91       | 3.82        | 182.5           | 148.9            | 0.353        | 4029 | 1692        | 83.10          | 9.4               |
| 60  | 47.89       | 4.83        | 230.8           | 189.7            | 0.416        | 4357 | 2000        | 83.70          | 8.8               |
| 65  | 47.88       | 5.8         | 277.3           | 227.6            | 0.468        | 4648 | 2249        | 83.60          | 8.3               |
| 70  | 47.86       | 6.93        | 331.1           | 270.7            | 0.524        | 4929 | 2536        | 83.20          | 7.8               |
| 75  | 47.83       | 8.22        | 392.9           | 319.3            | 0.585        | 5211 | 2842        | 82.70          | 7.4               |
| 80  | 47.81       | 9.71        | 463.6           | 375.9            | 0.654        | 5488 | 3182        | 82.50          | 7.0               |
| 85  | 47.78       | 11.26       | 537.4           | 433.3            | 0.720        | 5745 | 3453        | 81.90          | 6.5               |
| 90  | 47.75       | 12.97       | 618.8           | 494.2            | 0.783        | 6027 | 3779        | 81.10          | 6.2               |
| 95  | 47.72       | 14.9        | 710.7           | 560.1            | 0.851        | 6285 | 4123        | 80.00          | 5.9               |
| 100   | 47.67       | 17.95       | 855.4           | 657.6            | 0.953        | 6586 | 4595        | 77.90          | 5.4               |

| MAD 5008 IPE 170KV HAVOC 18x5.7 folding propeller AMPX 40A (5-14S) HV |             |             |                 |                  |              |      |             | 12S            | MAX 110°C         |
|---|-------------|-------------|-----------------|------------------|--------------|------|-------------|----------------|-------------------|
| Throttle [%]  | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [gf] | Efficiency [%] | Efficiency [gf/W] |
| 30  | 47.96       | 0.95        | 45.3            | 34.6             | 0.144        | 2291 | 597         | 78.00          | 13.5              |
| 35  | 47.95       | 1.4         | 67.0            | 52.0             | 0.190        | 2611 | 813         | 79.70          | 12.5              |
| 40  | 47.94       | 1.94        | 92.5            | 72.7             | 0.239        | 2906 | 931         | 80.10          | 10.3              |
| 45  | 47.93       | 2.58        | 123.1           | 99.3             | 0.293        | 3234 | 1248        | 82.20          | 10.3              |
| 50  | 47.92       | 3.44        | 164.1           | 134.1            | 0.356        | 3596 | 1550        | 83.20          | 9.6               |
| 55  | 47.9        | 4.44        | 212.2           | 174.4            | 0.424        | 3930 | 1775        | 83.80          | 8.5               |
| 60  | 47.88       | 5.56        | 265.6           | 217.8            | 0.490        | 4246 | 2116        | 83.60          | 8.1               |
| 65  | 47.86       | 6.79        | 324.6           | 266.5            | 0.562        | 4527 | 2377        | 83.50          | 7.5               |
| 70  | 47.83       | 8.08        | 386.1           | 314.2            | 0.626        | 4796 | 2717        | 82.80          | 7.2               |
| 75  | 47.81       | 9.53        | 455.4           | 366.1            | 0.690        | 5067 | 3134        | 81.80          | 7.0               |
| 80  | 47.78       | 11.25       | 536.8           | 428.8            | 0.769        | 5323 | 3487        | 81.20          | 6.6               |
| 85  | 47.75       | 13.2        | 629.7           | 494.8            | 0.846        | 5584 | 3844        | 79.80          | 6.2               |
| 90  | 47.71       | 15.05       | 717.7           | 557.2            | 0.915        | 5813 | 4131        | 78.80          | 5.8               |
| 95  | 47.66       | 17.34       | 826.0           | 626.8            | 0.991        | 6042 | 4463        | 76.90          | 5.5               |
| 100   | 47.6        | 20.63       | 981.2           | 718.2            | 1.088        | 6304 | 4790        | 74.10          | 4.9               |

The above data are the theoretical values when the input voltage is 48 V, for reference only. In the case of room temperature of 25°C and no additional cooling device, the current over 21A is non-working zone, 7-21A is short-term (about 10-30s), working zone, and below 7A is sustainable working zone. In actual use, please control the motor running time according to the working environment temperature and heat dissipation conditions.

5008

ENERGY EFFICIENT 240KV



## INDUSTRY PROFESSIONAL EDITION

1.0~2.0 kgf

RECOMMENDED  
HOVER THRUST

4.1 kgf

MAXIMUM  
THRUSTMAXIMUM THRUST MAY DEPEND ON  
BATTERY LEVEL, PROPELLER TYPE,  
AIR PRESSURE AND OTHER CONDITIONSOPTIMIZED  
WEIGHT 142g

EFFICIENCY &gt;80%



MAD 5008 IPE 240KV FLUXER PRO 21x6.3 MATT AMPX 40A PRO (2-6S)

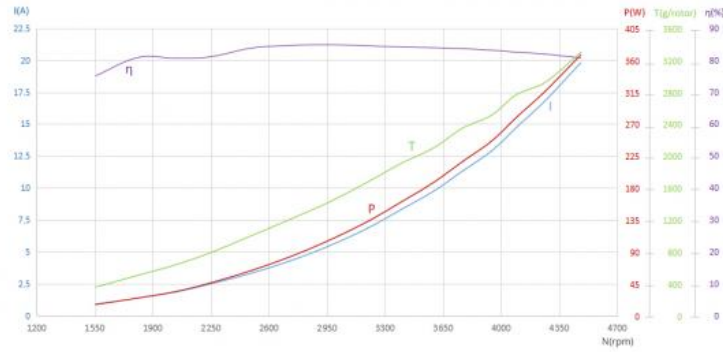
6S

MAX  
95°C

## Analytical Graph of Motor Operation

I - Current, P - Input Power,  $\eta$  - Electrical Efficiency, T - Thrust, N - Rotational Speed

The data above was measured with an input voltage of 24 V, at a temperature of 25°C and sea level. The rotational speed was adjusted by the throttle.



## Specifications

|                     |   |                              |  |
|---------------------|---|------------------------------|--|
| RPM/V               | 240 KV  | Nominal Voltage              | 6S lipo battery                        |
| No Load Current     | 0.67A/20V   | Internal resistance          | 104mΩ                                  |
| Motor Weight        | 142 g   | Product Boxed Weight         | 305g (110 x 110 x 50 mm)               |
| Maximum Current     | 29.9 A  | Maximum Power                | 788W                                   |
| Maximum thrust      | 4.1 kg  | Maximum Torque               | 1.1 Nm                                 |
| Recommended ESC     | MAD AMPX PRO 40A (2-6S)                                   | Recommended Propellers       | 20x6.0, 21x6.3, 22x6.6, 22x7.0, 18x6.1 |
| UAV take-off weight | 6S-21" 5kg-Quadcopter<br>7.5kg-Hexacopter 10kg-Octocopter | Single rotor take-off weight | 1kg ~ 2kg                              |

MAD 5008 IPE 240KV FLUXER PRO 20x6.0 MATT AMPX 40A PRO (2-6S)

6S

MAX  
93°C

| Throttle [%] | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [gf] | Efficiency [%] | Efficiency [gf/W] |
|--------------|-------------|-------------|-----------------|------------------|--------------|------|-------------|----------------|-------------------|
| 30           | 23.94       | 0.78        | 18.2            | 13.2             | 0.080        | 1587 | 304         | 75.20          | 17.3              |
| 35           | 23.93       | 1.17        | 27.5            | 20.6             | 0.106        | 1860 | 425         | 78.10          | 16.1              |
| 40           | 23.93       | 1.62        | 38.1            | 29.3             | 0.135        | 2084 | 549         | 79.40          | 14.9              |
| 45           | 23.92       | 2.1         | 49.7            | 38.9             | 0.162        | 2292 | 684         | 81.30          | 14.3              |
| 50           | 23.91       | 2.68        | 63.7            | 50.5             | 0.194        | 2490 | 831         | 82.80          | 13.6              |
| 55           | 23.89       | 3.7         | 88.1            | 71.1             | 0.240        | 2829 | 1039        | 84.10          | 12.3              |
| 60           | 23.87       | 4.77        | 113.3           | 91.7             | 0.283        | 3091 | 1241        | 83.80          | 11.4              |
| 65           | 23.85       | 5.85        | 139.2           | 112.2            | 0.324        | 3306 | 1445        | 83.50          | 10.8              |
| 70           | 23.83       | 6.97        | 165.5           | 134.1            | 0.364        | 3516 | 1637        | 83.80          | 10.2              |
| 75           | 23.81       | 8.21        | 195.1           | 157.8            | 0.405        | 3719 | 1853        | 83.80          | 9.8               |
| 80           | 23.79       | 9.61        | 228.4           | 184.3            | 0.450        | 3911 | 2055        | 83.60          | 9.3               |
| 85           | 23.76       | 10.92       | 259.0           | 210.1            | 0.492        | 4081 | 2232        | 83.80          | 8.9               |
| 90           | 23.74       | 12.33       | 292.2           | 236.3            | 0.530        | 4262 | 2413        | 83.50          | 8.5               |
| 95           | 23.7        | 14.08       | 333.3           | 268.9            | 0.579        | 4433 | 2639        | 83.10          | 8.2               |
| 100          | 23.66       | 16.66       | 393.6           | 315.4            | 0.643        | 4687 | 2926        | 82.40          | 7.7               |

MAD 5008 IPE 240KV FLUXER PRO 21x6.3 MATT AMPX 40A PRO (2-6S)

6S

MAX  
95°C

| Throttle [%] | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [gf] | Efficiency [%] | Efficiency [gf/W] |
|--------------|-------------|-------------|-----------------|------------------|--------------|------|-------------|----------------|-------------------|
| 30           | 23.93       | 0.92        | 21.8            | 15.7             | 0.097        | 1556 | 358         | 75.10          | 17.1              |
| 35           | 23.92       | 1.39        | 32.9            | 25.3             | 0.133        | 1819 | 511         | 80.90          | 16.3              |
| 40           | 23.91       | 1.87        | 44.1            | 34.3             | 0.160        | 2044 | 641         | 80.60          | 15.1              |
| 45           | 23.9        | 2.47        | 58.6            | 45.8             | 0.195        | 2242 | 785         | 81.00          | 13.9              |
| 50           | 23.88       | 3.34        | 79.3            | 63.9             | 0.245        | 2498 | 1005        | 83.80          | 13.2              |
| 55           | 23.87       | 4.32        | 102.8           | 83.7             | 0.292        | 2734 | 1212        | 84.60          | 12.3              |
| 60           | 23.84       | 5.42        | 128.7           | 105.4            | 0.341        | 2955 | 1415        | 84.80          | 11.4              |
| 65           | 23.82       | 6.83        | 162.3           | 132.4            | 0.396        | 3192 | 1670        | 84.50          | 10.7              |
| 70           | 23.79       | 8.33        | 197.7           | 160.6            | 0.451        | 3401 | 1911        | 84.10          | 10.0              |
| 75           | 23.77       | 9.74        | 231.0           | 187.7            | 0.499        | 3592 | 2100        | 83.90          | 9.4               |
| 80           | 23.74       | 11.33       | 268.4           | 217.3            | 0.551        | 3768 | 2349        | 83.60          | 9.0               |
| 85           | 23.71       | 12.89       | 305.2           | 245.9            | 0.596        | 3942 | 2511        | 83.10          | 8.5               |
| 90           | 23.68       | 14.76       | 349.0           | 279.7            | 0.653        | 4094 | 2770        | 82.50          | 8.2               |
| 95           | 23.65       | 16.74       | 395.2           | 314.8            | 0.706        | 4259 | 2913        | 81.90          | 7.6               |
| 100          | 23.59       | 19.8        | 466.6           | 367.4            | 0.783        | 4480 | 3298        | 80.70          | 7.3               |

MAD 5008 IPE 240KV FLUXER PRO 22x6.6 MATT AMPX 40A PRO (2-6S)

6S

MAX  
98°C



| Throttle [%] | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [gf] | Efficiency [%] | Efficiency [g/W] |
|--------------|-------------|-------------|-----------------|------------------|--------------|------|-------------|----------------|------------------|
| 30           | 23.92       | 1.03        | 24.0            | 18.0             | 0.113        | 1519 | 409         | 78.40          | 17.8             |
| 35           | 23.92       | 1.62        | 38.2            | 29.3             | 0.157        | 1789 | 586         | 80.20          | 16.0             |
| 40           | 23.91       | 2.25        | 53.3            | 41.5             | 0.197        | 2017 | 752         | 80.90          | 14.7             |
| 45           | 23.89       | 2.84        | 67.3            | 53.0             | 0.232        | 2186 | 905         | 81.70          | 14.0             |
| 50           | 23.88       | 3.68        | 87.5            | 69.5             | 0.278        | 2392 | 1100        | 82.70          | 13.1             |
| 55           | 23.85       | 4.92        | 116.8           | 93.9             | 0.338        | 2655 | 1346        | 83.30          | 11.9             |
| 60           | 23.83       | 6.15        | 146.1           | 117.7            | 0.391        | 2878 | 1579        | 83.60          | 11.2             |
| 65           | 23.81       | 7.64        | 181.6           | 145.9            | 0.451        | 3092 | 1846        | 83.20          | 10.5             |
| 70           | 23.78       | 9.36        | 222.1           | 176.9            | 0.512        | 3303 | 2102        | 82.30          | 9.8              |
| 75           | 23.75       | 10.9        | 258.2           | 205.6            | 0.565        | 3473 | 2332        | 82.20          | 9.3              |
| 80           | 23.72       | 12.5        | 296.0           | 235.1            | 0.617        | 3638 | 2545        | 81.90          | 8.9              |
| 85           | 23.68       | 14.48       | 342.4           | 269.7            | 0.677        | 3807 | 2803        | 81.10          | 8.4              |
| 90           | 23.65       | 16.57       | 391.2           | 305.2            | 0.735        | 3965 | 3018        | 80.10          | 7.9              |
| 95           | 23.61       | 18.68       | 440.7           | 340.5            | 0.790        | 4117 | 3188        | 79.30          | 7.4              |
| 100          | 23.54       | 22.23       | 522.9           | 397.2            | 0.877        | 4327 | 3565        | 77.70          | 7.0              |

MAD 5008 IPE 240KV HAVOC 22x7.0 folding propeller AMPX 40A PRO (2-6S)

6S

MAX  
83°C

| Throttle [%] | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [gf] | Efficiency [%] | Efficiency [g/W] |
|--------------|-------------|-------------|-----------------|------------------|--------------|------|-------------|----------------|------------------|
| 30           | 24.12       | 1.38        | 32.9            | 24.7             | 0.162        | 1455 | 546         | 76.00          | 16.8             |
| 35           | 24.1        | 2.2         | 52.4            | 40.5             | 0.225        | 1721 | 786         | 77.30          | 15.0             |
| 40           | 24.08       | 3.18        | 76.1            | 58.5             | 0.286        | 1952 | 1022        | 77.30          | 13.5             |
| 45           | 24.07       | 3.95        | 94.7            | 72.5             | 0.332        | 2089 | 1197        | 76.90          | 12.7             |
| 50           | 24.04       | 5.06        | 120.9           | 92.2             | 0.389        | 2263 | 1400        | 76.20          | 11.6             |
| 55           | 24.02       | 6.34        | 151.6           | 115.0            | 0.449        | 2445 | 1636        | 75.90          | 10.8             |
| 60           | 23.99       | 8.29        | 198.5           | 149.9            | 0.536        | 2672 | 1967        | 78.30          | 10.3             |
| 65           | 23.96       | 10.14       | 242.3           | 181.1            | 0.603        | 2868 | 2233        | 77.90          | 9.6              |
| 70           | 23.91       | 12.38       | 295.4           | 217.8            | 0.684        | 3042 | 2537        | 76.60          | 8.9              |
| 75           | 23.88       | 14.61       | 348.3           | 251.7            | 0.753        | 3195 | 2799        | 75.00          | 8.3              |
| 80           | 23.83       | 17.36       | 413.0           | 291.8            | 0.832        | 3348 | 3089        | 73.20          | 7.7              |
| 85           | 23.79       | 19.64       | 466.7           | 324.4            | 0.892        | 3472 | 3313        | 71.80          | 7.3              |
| 90           | 23.73       | 22.58       | 535.2           | 362.1            | 0.961        | 3597 | 3550        | 69.70          | 6.8              |
| 95           | 23.67       | 26.18       | 619.0           | 401.5            | 1.032        | 3715 | 3774        | 66.70          | 6.3              |
| 100          | 23.61       | 29.95       | 706.5           | 446.0            | 1.106        | 3852 | 4037        | 64.80          | 5.9              |

MAD 5008 IPE 240KV FLUXER PRO 17x5.8 MATT AMPX 40A PRO (2-6S)

8S

MAX  
60°C

| Throttle [%] | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [gf] | Efficiency [%] | Efficiency [g/W] |
|--------------|-------------|-------------|-----------------|------------------|--------------|------|-------------|----------------|------------------|
| 30           | 32.1        | 0.96        | 30.6            | 20.2             | 0.086        | 2242 | 401         | 66.10          | 13.1             |
| 35           | 32.1        | 1.33        | 42.5            | 29.5             | 0.111        | 2553 | 527         | 70.20          | 12.5             |
| 40           | 32.09       | 1.77        | 56.3            | 41.0             | 0.138        | 2843 | 657         | 73.10          | 11.7             |
| 45           | 32.08       | 2.34        | 75.0            | 56.0             | 0.169        | 3160 | 822         | 75.70          | 11.1             |
| 50           | 32.06       | 3.11        | 99.4            | 77.4             | 0.209        | 3532 | 1022        | 77.90          | 10.3             |
| 55           | 32.05       | 4.03        | 128.8           | 102.1            | 0.250        | 3895 | 1244        | 79.50          | 9.7              |
| 60           | 32.03       | 5.02        | 160.3           | 128.8            | 0.291        | 4224 | 1446        | 80.40          | 9.0              |
| 65           | 32          | 6.15        | 196.1           | 159.6            | 0.338        | 4515 | 1660        | 81.40          | 8.5              |
| 70           | 31.98       | 7.33        | 234.2           | 191.4            | 0.381        | 4797 | 1825        | 84.40          | 8.1              |
| 75           | 31.96       | 8.62        | 274.8           | 223.8            | 0.421        | 5079 | 2029        | 83.80          | 7.6              |
| 80           | 31.93       | 10.14       | 323.3           | 265.2            | 0.473        | 5353 | 2294        | 84.50          | 7.3              |
| 85           | 31.9        | 11.8        | 375.8           | 307.9            | 0.524        | 5618 | 2602        | 84.30          | 7.1              |
| 90           | 31.87       | 13.64       | 434.1           | 354.2            | 0.574        | 5890 | 2882        | 83.80          | 6.8              |
| 95           | 31.83       | 15.7        | 499.2           | 405.2            | 0.629        | 6149 | 3155        | 83.30          | 6.5              |
| 100          | 31.77       | 18.57       | 589.5           | 472.3            | 0.696        | 6476 | 3485        | 82.10          | 6.1              |

MAD 5008 IPE 240KV FLUXER PRO 18x6.1 MATT AMPX 40A PRO (2-6S)

8S

MAX  
68°C

| Throttle [%] | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [gf] | Efficiency [%] | Efficiency [g/W] |
|--------------|-------------|-------------|-----------------|------------------|--------------|------|-------------|----------------|------------------|
| 30           | 32.1        | 1.12        | 35.3            | 24.8             | 0.108        | 2203 | 468         | 70.30          | 13.3             |
| 35           | 32.09       | 1.55        | 49.3            | 36.3             | 0.139        | 2502 | 618         | 73.80          | 12.6             |
| 40           | 32.08       | 2.07        | 65.9            | 49.0             | 0.168        | 2792 | 757         | 74.40          | 11.5             |
| 45           | 32.07       | 2.76        | 88.0            | 68.0             | 0.210        | 3093 | 963         | 77.40          | 11.0             |
| 50           | 32.06       | 3.64        | 116.3           | 92.2             | 0.255        | 3449 | 1172        | 79.40          | 10.1             |
| 55           | 32.03       | 4.76        | 151.9           | 123.3            | 0.310        | 3794 | 1421        | 81.20          | 9.4              |
| 60           | 32.01       | 6.07        | 193.7           | 158.7            | 0.370        | 4102 | 1731        | 82.10          | 9.0              |
| 65           | 31.98       | 7.31        | 233.5           | 192.0            | 0.418        | 4391 | 1962        | 84.80          | 8.7              |
| 70           | 31.96       | 8.67        | 276.5           | 227.4            | 0.467        | 4646 | 2175        | 84.80          | 8.1              |
| 75           | 31.93       | 10.2        | 325.4           | 266.9            | 0.520        | 4902 | 2431        | 84.50          | 7.7              |
| 80           | 31.9        | 11.91       | 379.2           | 310.5            | 0.576        | 5151 | 2686        | 84.20          | 7.3              |
| 85           | 31.86       | 13.81       | 439.4           | 357.5            | 0.633        | 5394 | 2975        | 83.60          | 7.0              |
| 90           | 31.83       | 15.93       | 506.7           | 408.2            | 0.692        | 5636 | 3229        | 82.60          | 6.5              |
| 95           | 31.78       | 18.19       | 577.5           | 462.6            | 0.752        | 5871 | 3507        | 82.10          | 6.2              |
| 100          | 31.71       | 21.62       | 685.1           | 542.9            | 0.839        | 6178 | 3926        | 81.00          | 5.9              |

MAD 5008 IPE 240KV HAVOC 18x5.7 folding propeller AMPX 40A PRO (2-6S)

8S

MAX  
74°C

| Throttle [%] | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [gf] | Efficiency [%] | Efficiency [g/W] |
|--------------|-------------|-------------|-----------------|------------------|--------------|------|-------------|----------------|------------------|
| 30           | 32.09       | 1.26        | 40.0            | 28.8             | 0.127        | 2173 | 519         | 72.20          | 13.0             |
| 35           | 32.09       | 1.81        | 57.6            | 43.2             | 0.168        | 2467 | 700         | 75.60          | 12.2             |
| 40           | 32.08       | 2.47        | 78.7            | 60.1             | 0.208        | 2762 | 858         | 76.40          | 10.9             |
| 45           | 32.06       | 3.17        | 101.1           | 78.9             | 0.248        | 3046 | 977         | 78.00          | 9.7              |
| 50           | 32.05       | 4.2         | 134.0           | 107.9            | 0.305        | 3385 | 1160        | 80.50          | 8.7              |

|     |       |       |       |       |       |      |      |       |     |
|-----|-------|-------|-------|-------|-------|------|------|-------|-----|
| 55  | 32.02 | 5.53  | 176.7 | 142.5 | 0.367 | 3709 | 1499 | 80.70 | 8.5 |
| 60  | 31.99 | 6.94  | 221.7 | 179.9 | 0.428 | 4016 | 1764 | 82.90 | 8.1 |
| 65  | 31.96 | 8.44  | 269.2 | 217.8 | 0.485 | 4288 | 2004 | 83.40 | 7.7 |
| 70  | 31.94 | 10    | 318.7 | 258.0 | 0.542 | 4544 | 2211 | 83.40 | 7.1 |
| 75  | 31.9  | 11.87 | 377.9 | 303.7 | 0.607 | 4782 | 2607 | 82.60 | 7.1 |
| 80  | 31.86 | 13.89 | 441.9 | 351.5 | 0.668 | 5023 | 2986 | 81.70 | 6.9 |
| 85  | 31.82 | 16.22 | 515.5 | 406.5 | 0.739 | 5257 | 3250 | 80.90 | 6.5 |
| 90  | 31.77 | 18.52 | 588.1 | 461.2 | 0.801 | 5499 | 3583 | 80.40 | 6.2 |
| 95  | 31.71 | 21.08 | 668.1 | 518.3 | 0.866 | 5715 | 3827 | 79.30 | 5.9 |
| 100 | 31.66 | 24.93 | 788.7 | 600.3 | 0.958 | 5987 | 4166 | 77.70 | 5.4 |

The above data are the theoretical values when the input voltage is 32 V, for reference only. In the case of room temperature of 25°C and no additional cooling device, the current over 25A is non-working zone, 8-25A is short-term (about 10-30s), working zone, and below 8A is sustainable working zone. In actual use, please control the motor running time according to the working environment temperature and heat dissipation conditions.

# 5008

## ENERGY EFFICIENT 300KV

### INDUSTRY PROFESSIONAL EDITION

1.0~1.2 kgf

RECOMMENDED  
HOVER THRUST

3.8 kgf



MAXIMUM  
THRUST

MAXIMUM THRUST MAY DEPEND ON  
BATTERY LEVEL, PROPELLER TYPE,  
AIR PRESSURE AND OTHER CONDITIONS

OPTIMIZED  
WEIGHT

136g

EFFICIENCY >80%



MAD 5008 IPE 300KV FLUXER PRO 18x6.1 MATT AMPX 40A PRO (2-6S)

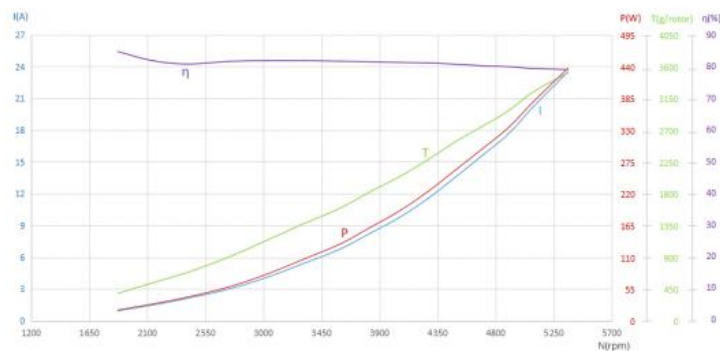
6S

MAX  
72°C

#### Analytical Graph of Motor Operation

I - Current, P - Input Power,  $\eta$  - Electrical Efficiency, T - Thrust, N - Rotational Speed

The data above was measured with an input voltage of 24 V, at a temperature of 25°C and sea level. The rotational speed was adjusted by the throttle.



#### Specifications

|                     |  |                              |                                |
|---------------------|--|------------------------------|--------------------------------|
| RPM/V               | 300 KV   | Nominal Voltage              | 6S lipo battery                |
| No Load Current     | 0.99A / 20V  | Internal resistance          | 80mΩ                           |
| Motor Weight        | 136 g  | Product Boxed Weight         | 299g (110 x 110 x 50 mm)       |
| Maximum Current     | 25.5 A   | Maximum Power                | 602W                           |
| Maximum thrust      | 3.8 kg   | Maximum Torque               | 0.84 Nm                        |
| Recommended ESC     | MAD AMPX PRO 40A (2-6S)                                      | Recommended Propellers       | 18x6.1, 18x5.7, 19x5.7, 20x6.0 |
| UAV take-off weight | 6S-18" 5kg--Quadcopter<br>7.5kg--Hexacopter 10kg--Octocopter | Single rotor take-off weight | 1kg ~ 2kg                      |

MAD 5008 IPE 300KV FLUXER PRO 18x6.1 MATT AMPX 40A PRO (2-6S)

6S

MAX  
72°C

| Throttle [%] | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [g] | Efficiency [%] | Efficiency [g/f/W] |
|--------------|-------------|-------------|-----------------|------------------|--------------|------|------------|----------------|--------------------|
| 30           | 24.29       | 0.86        | 20.6            | 16.2             | 0.081        | 1913 | 363        | 78.58          | 17.4               |
| 35           | 24.28       | 1.32        | 31.9            | 24.8             | 0.108        | 2201 | 497        | 77.60          | 15.5               |
| 40           | 24.26       | 1.83        | 43.8            | 34.8             | 0.135        | 2468 | 626        | 79.45          | 14.1               |
| 45           | 24.23       | 2.65        | 63.7            | 51.5             | 0.175        | 2819 | 826        | 80.87          | 12.9               |
| 50           | 24.19       | 3.64        | 87.6            | 71.2             | 0.215        | 3157 | 1027       | 81.18          | 11.6               |
| 55           | 24.15       | 4.76        | 114.5           | 93.5             | 0.260        | 3440 | 1240       | 81.60          | 10.8               |
| 60           | 24.11       | 5.88        | 141.3           | 115.5            | 0.298        | 3707 | 1440       | 81.71          | 10.2               |
| 65           | 24.07       | 7.12        | 170.8           | 140.3            | 0.338        | 3962 | 1624       | 82.05          | 9.5                |
| 70           | 24.03       | 8.52        | 204.0           | 167.8            | 0.383        | 4189 | 1843       | 82.24          | 9.0                |
| 75           | 23.98       | 9.96        | 238.3           | 195.4            | 0.424        | 4407 | 2049       | 81.95          | 8.6                |
| 80           | 23.93       | 11.51       | 275.0           | 224.7            | 0.462        | 4643 | 2244       | 81.67          | 8.1                |
| 85           | 23.86       | 13.23       | 315.0           | 257.1            | 0.506        | 4854 | 2447       | 81.55          | 7.8                |
| 90           | 23.8        | 15.24       | 362.1           | 296.4            | 0.560        | 5058 | 2695       | 81.79          | 7.4                |
| 95           | 23.74       | 17.17       | 407.1           | 330.2            | 0.598        | 5272 | 2900       | 81.06          | 7.1                |

| 100   | 23.63       | 20.37       | 480.9           | 388.6            | 0.670        | 5543 | 3255        | 80.76          | 6.8               |
|---|-------------|-------------|-----------------|------------------|--------------|------|-------------|----------------|-------------------|
| MAD 5008 IPE 300KV HAVOC 18x5.7 folding propeller AMPX 40A PRO (2~6S) |             |             |                 |                  |              |      |             | 6S             | MAX 76°C          |
| Throttle [%]  | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [gf] | Efficiency [%] | Efficiency [gf/W] |
| 30  | 24.28       | 0.94        | 22.0            | 18.7             | 0.095        | 1871 | 388         | 84.71          | 17.1              |
| 35  | 24.26       | 1.51        | 36.0            | 29.5             | 0.131        | 2150 | 543         | 81.80          | 14.8              |
| 40  | 24.24       | 2.11        | 50.6            | 40.9             | 0.162        | 2407 | 682         | 80.82          | 13.3              |
| 45  | 24.21       | 2.97        | 71.2            | 58.1             | 0.204        | 2724 | 897         | 81.59          | 12.5              |
| 50  | 24.18       | 4.11        | 98.8            | 81.0             | 0.255        | 3028 | 1142        | 81.88          | 11.5              |
| 55  | 24.12       | 5.46        | 131.2           | 107.5            | 0.309        | 3320 | 1382        | 81.85          | 10.5              |
| 60  | 24.08       | 6.79        | 163.0           | 133.2            | 0.354        | 3597 | 1598        | 81.67          | 9.8               |
| 65  | 24.03       | 8.3         | 198.8           | 162.2            | 0.404        | 3832 | 1833        | 81.51          | 9.2               |
| 70  | 23.98       | 9.78        | 234.1           | 190.4            | 0.448        | 4056 | 2043        | 81.30          | 8.7               |
| 75  | 23.92       | 11.57       | 276.2           | 224.3            | 0.501        | 4277 | 2285        | 81.14          | 8.3               |
| 80  | 23.84       | 13.62       | 324.1           | 261.9            | 0.557        | 4493 | 2543        | 80.75          | 7.8               |
| 85  | 23.77       | 15.6        | 370.3           | 297.4            | 0.605        | 4695 | 2752        | 80.26          | 7.4               |
| 90  | 23.7        | 17.66       | 418.2           | 334.6            | 0.652        | 4899 | 2976        | 79.96          | 7.1               |
| 95  | 23.63       | 20.16       | 475.9           | 378.2            | 0.710        | 5087 | 3237        | 79.40          | 6.8               |
| 100   | 23.52       | 23.51       | 552.7           | 437.2            | 0.779        | 5360 | 3512        | 79.06          | 6.4               |
| MAD 5008 IPE 300KV FLUXER PRO 19x5.7 MATT AMPX 40A PRO (2~6S)         |             |             |                 |                  |              |      |             | 6S             | MAX 83°C          |
| Throttle [%]  | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [gf] | Efficiency [%] | Temp. [°C]        |
| 30  | 23.98       | 1.02        | 23.9            | 16.5             | 0.083        | 1898 | 366         | 71.90          | 15.9              |
| 35  | 23.97       | 1.45        | 34.3            | 24.9             | 0.109        | 2181 | 494         | 75.70          | 15.0              |
| 40  | 23.96       | 1.96        | 46.2            | 34.7             | 0.136        | 2443 | 615         | 77.70          | 13.8              |
| 45  | 23.95       | 2.81        | 66.7            | 51.7             | 0.177        | 2791 | 812         | 80.60          | 12.7              |
| 50  | 23.93       | 3.73        | 88.8            | 70.4             | 0.218        | 3088 | 1015        | 82.60          | 11.9              |
| 55  | 23.92       | 4.76        | 113.5           | 90.1             | 0.257        | 3352 | 1208        | 82.60          | 11.1              |
| 60  | 23.9        | 5.97        | 142.0           | 113.2            | 0.300        | 3607 | 1407        | 82.80          | 10.3              |
| 65  | 23.87       | 7.22        | 171.6           | 137.6            | 0.341        | 3854 | 1621        | 83.10          | 9.8               |
| 70  | 23.85       | 8.45        | 201.2           | 162.1            | 0.379        | 4087 | 1811        | 83.50          | 9.3               |
| 75  | 23.82       | 10.05       | 238.7           | 194.8            | 0.429        | 4336 | 2040        | 84.40          | 8.8               |
| 80  | 23.8        | 11.61       | 275.8           | 222.5            | 0.469        | 4530 | 2224        | 83.50          | 8.3               |
| 85  | 23.77       | 13.36       | 317.0           | 254.1            | 0.512        | 4740 | 2456        | 82.80          | 8.0               |
| 90  | 23.72       | 15.69       | 371.7           | 304.9            | 0.579        | 5032 | 2772        | 84.60          | 7.7               |
| 95  | 23.69       | 17.71       | 419.1           | 342.2            | 0.624        | 5237 | 2993        | 84.10          | 7.4               |
| 100   | 23.64       | 20.94       | 494.6           | 400.2            | 0.694        | 5507 | 3342        | 83.10          | 6.9               |
| MAD 5008 IPE 300KV FLUXER PRO 20x6.0 MATT AMPX 40A PRO (2~6S)         |             |             |                 |                  |              |      |             | 6S             | MAX 88°C          |
| Throttle [%]  | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [gf] | Efficiency [%] | Temp. [°C]        |
| 30  | 24.04       | 1.17        | 27.7            | 20.3             | 0.106        | 1846 | 436         | 73.70          | 15.8              |
| 35  | 24.03       | 1.75        | 41.9            | 31.8             | 0.143        | 2133 | 604         | 76.00          | 14.4              |
| 40  | 24.02       | 2.38        | 56.9            | 43.5             | 0.175        | 2372 | 761         | 76.40          | 13.4              |
| 45  | 24          | 3.25        | 77.4            | 61.3             | 0.220        | 2657 | 982         | 80.60          | 12.9              |
| 50  | 23.98       | 4.37        | 104.5           | 83.8             | 0.271        | 2953 | 1204        | 83.90          | 12.1              |
| 55  | 23.96       | 5.75        | 137.3           | 110.8            | 0.324        | 3264 | 1462        | 84.00          | 11.1              |
| 60  | 23.93       | 7.18        | 171.4           | 138.3            | 0.374        | 3535 | 1709        | 84.00          | 10.4              |
| 65  | 23.9        | 8.75        | 208.6           | 168.7            | 0.427        | 3771 | 1973        | 84.00          | 9.8               |
| 70  | 23.87       | 10.38       | 247.5           | 199.3            | 0.477        | 3993 | 2210        | 83.60          | 9.3               |
| 75  | 23.84       | 12.37       | 294.5           | 235.4            | 0.532        | 4225 | 2473        | 82.80          | 8.7               |
| 80  | 23.81       | 14.46       | 343.8           | 273.3            | 0.588        | 4440 | 2719        | 82.30          | 8.2               |
| 85  | 23.77       | 16.66       | 395.5           | 312.9            | 0.644        | 4637 | 2992        | 81.70          | 7.8               |
| 90  | 23.72       | 19          | 450.3           | 354.1            | 0.700        | 4828 | 3255        | 81.10          | 7.5               |
| 95  | 23.69       | 21.67       | 512.9           | 400.0            | 0.761        | 5017 | 3534        | 80.30          | 7.1               |
| 100   | 23.62       | 25.52       | 602.3           | 463.2            | 0.840        | 5268 | 3879        | 79.00          | 6.6               |

The above data are the theoretical values when the input voltage is 48 V, for reference only. In the case of room temperature of 25°C and no additional cooling device, the current over 26A is non-working zone, 9-26A is short-term (about 10-30s) working zone, and below 9A is sustainable working zone. In actual use, please control the motor running time according to the working environment temperature and heat dissipation conditions.

5008

ENERGY EFFICIENT 340KV

INDUSTRY PROFESSIONAL EDITION

1.5~2.0 kgf

RECOMMENDED HOVER THRUST

OPTIMIZED WEIGHT 136g

4.0 kgf

MAXIMUM THRUST

MAXIMUM THRUST MAY DEPEND ON BATTERY LEVEL, PROPELLER TYPE, AIR PRESSURE, AND OTHER CONDITIONS.

EFFICIENCY >79%

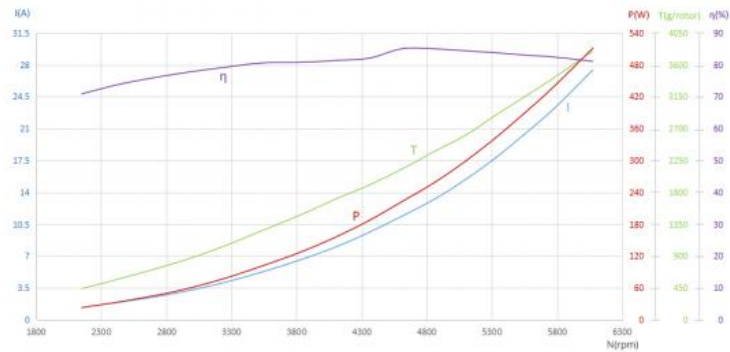




## Analytical Graph of Motor Operation

I - Current, P - Input Power,  $\eta$  - Electrical Efficiency, T - Thrust, N - Rotational Speed

The data above was measured with an input voltage of 24 V, at a temperature of 25°C and sea level. The rotational speed was adjusted by the throttle.



## Specifications

|                     |  |                              |                                |
|---------------------|--|------------------------------|--------------------------------|
| RPM/V               | 340KV  | Nominal Voltage              | 6S lipo battery                |
| No Load Current     | 1.1A / 20V   | Internal resistance          | 66.4mΩ                         |
| Motor Weight        | 136 g  | Product Boxed Weight         | 299g (110 x 110 x 50 mm)       |
| Maximum Current     | 27.7 A   | Maximum Power                | 734W                           |
| Maximum thrust      | 4.0 kg   | Maximum Torque               | 0.91 Nm                        |
| Recommended ESC     | MAD AMPX PRO 40A (2-6S)                                    | Recommended Propellers       | 17x5.8, 18x6.1, 18x5.7, 19x5.7 |
| UAV take-off weight | 6S-18" 6kg--Quadcopter<br>9kg--Hexacopter 12kg--Octocopter | Single rotor take-off weight | 1.5kg ~ 2kg                    |

## MAD 5008 IPE 340KV FLUXER PRO 17x5.8 MATT AMPX 40A PRO (2-6S)

6S MAX  
77°C

| Throttle [%] | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [gf] | Efficiency [%] | Temp. [°C] |
|--------------|-------------|-------------|-----------------|------------------|--------------|------|-------------|----------------|------------|
| 30           | 24          | 1.22        | 28.7            | 18.8             | 0.082        | 2201 | 380         | 66.30          | 13.4       |
| 35           | 23.98       | 1.69        | 39.9            | 27.3             | 0.104        | 2514 | 500         | 71.40          | 13.1       |
| 40           | 23.97       | 2.5         | 59.1            | 44.1             | 0.145        | 2904 | 702         | 77.50          | 12.3       |
| 45           | 23.96       | 3.35        | 79.6            | 60.6             | 0.178        | 3247 | 881         | 79.20          | 11.5       |
| 50           | 23.94       | 4.38        | 104.5           | 81.1             | 0.217        | 3580 | 1090        | 81.00          | 10.9       |
| 55           | 23.92       | 5.52        | 131.6           | 103.7            | 0.254        | 3903 | 1290        | 82.10          | 10.2       |
| 60           | 23.9        | 6.7         | 159.5           | 126.8            | 0.289        | 4194 | 1486        | 82.60          | 9.7        |
| 65           | 23.87       | 8           | 190.4           | 153.4            | 0.329        | 4450 | 1664        | 83.60          | 9.1        |
| 70           | 23.85       | 9.48        | 225.7           | 182.2            | 0.368        | 4732 | 1859        | 83.70          | 8.5        |
| 75           | 23.82       | 11.06       | 262.9           | 213.2            | 0.407        | 4997 | 2065        | 83.90          | 8.1        |
| 80           | 23.79       | 12.93       | 307.1           | 249.2            | 0.454        | 5245 | 2327        | 83.90          | 7.8        |
| 85           | 23.75       | 14.9        | 353.3           | 285.9            | 0.498        | 5480 | 2556        | 83.50          | 7.5        |
| 90           | 23.72       | 16.94       | 401.2           | 326.0            | 0.544        | 5721 | 2780        | 83.70          | 7.1        |
| 95           | 23.68       | 19.53       | 461.9           | 373.3            | 0.597        | 5974 | 3034        | 83.10          | 6.8        |
| 100          | 23.6        | 23.12       | 545.4           | 438.4            | 0.665        | 6296 | 3365        | 82.50          | 6.3        |

## MAD 5008 IPE 340KV HAVOC 18x5.7 folding propeller AMPX 40A PRO (2-6S)

6S MAX  
78°C

| Throttle [%] | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [gf] | Efficiency [%] | Temp. [°C] |
|--------------|-------------|-------------|-----------------|------------------|--------------|------|-------------|----------------|------------|
| 30           | 24.15       | 1.53        | 36.1            | 25.9             | 0.118        | 2094 | 481         | 72.00          | 13.4       |
| 35           | 24.13       | 2.24        | 53.4            | 39.8             | 0.159        | 2398 | 611         | 74.60          | 11.5       |
| 40           | 24.11       | 3.43        | 82.1            | 64.1             | 0.220        | 2785 | 935         | 78.30          | 11.4       |
| 45           | 24.09       | 4.64        | 111.4           | 87.6             | 0.269        | 3117 | 1152        | 79.10          | 10.4       |
| 50           | 24.07       | 5.98        | 143.4           | 112.9            | 0.313        | 3444 | 1422        | 78.90          | 9.9        |
| 55           | 24.04       | 7.47        | 179.1           | 143.6            | 0.368        | 3725 | 1589        | 80.20          | 8.9        |
| 60           | 24          | 9.37        | 224.5           | 179.2            | 0.429        | 3990 | 1881        | 79.80          | 8.4        |
| 65           | 23.98       | 11.03       | 263.9           | 211.9            | 0.479        | 4229 | 2000        | 83.70          | 7.9        |
| 70           | 23.94       | 13.07       | 312.5           | 250.0            | 0.533        | 4483 | 2239        | 83.30          | 7.5        |
| 75           | 23.9        | 15.34       | 366.3           | 291.7            | 0.591        | 4713 | 2532        | 82.70          | 7.2        |
| 80           | 23.86       | 17.89       | 426.2           | 335.7            | 0.650        | 4930 | 2933        | 81.60          | 7.1        |
| 85           | 23.81       | 20.52       | 488.3           | 380.7            | 0.708        | 5135 | 3192        | 80.70          | 6.8        |
| 90           | 23.76       | 23.43       | 556.0           | 430.8            | 0.770        | 5347 | 3512        | 80.00          | 6.5        |
| 95           | 23.7        | 26.37       | 624.6           | 479.7            | 0.825        | 5550 | 3789        | 79.10          | 6.3        |
| 100          | 23.62       | 27.73       | 734.2           | 554.9            | 0.911        | 5815 | 3994        | 77.60          | 5.6        |

## MAD 5008 IPE 340KV FLUXER PRO 18x6.1 MATT AMPX 40A PRO (2-6S)

6S MAX  
86°C

| Throttle [%] | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [gf] | Efficiency [%] | Temp. [°C] |
|--------------|-------------|-------------|-----------------|------------------|--------------|------|-------------|----------------|------------|
| 30           | 24.15       | 1.36        | 32.6            | 22.9             | 0.102        | 2151 | 439         | 70.90          | 13.6       |
| 35           | 24.13       | 1.96        | 46.7            | 34.5             | 0.134        | 2462 | 589         | 74.10          | 12.6       |
| 40           | 24.12       | 2.91        | 69.6            | 53.4             | 0.178        | 2871 | 803         | 77.10          | 11.6       |
| 45           | 24.1        | 3.95        | 94.5            | 74.7             | 0.223        | 3206 | 1013        | 79.00          | 10.7       |
| 50           | 24.08       | 5.25        | 125.9           | 101.2            | 0.273        | 3535 | 1258        | 80.60          | 10.0       |
| 55           | 24.05       | 6.6         | 158.4           | 127.6            | 0.318        | 3833 | 1483        | 80.80          | 9.4        |
| 60           | 24.03       | 8.1         | 193.9           | 157.8            | 0.366        | 4119 | 1719        | 81.40          | 8.9        |
| 65           | 24          | 9.6         | 229.7           | 186.9            | 0.410        | 4356 | 1901        | 82.10          | 8.4        |
| 70           | 23.96       | 11.45       | 273.8           | 223.9            | 0.463        | 4619 | 2138        | 85.10          | 8.1        |



|     |       |       |       |       |       |      |      |       |     |
|-----|-------|-------|-------|-------|-------|------|------|-------|-----|
| 75  | 23.93 | 13.3  | 317.9 | 259.5 | 0.509 | 4865 | 2383 | 85.00 | 7.8 |
| 80  | 23.9  | 15.43 | 368.4 | 299.2 | 0.560 | 5099 | 2609 | 84.40 | 7.4 |
| 85  | 23.86 | 17.76 | 423.1 | 342.1 | 0.614 | 5325 | 2885 | 83.80 | 7.1 |
| 90  | 23.81 | 20.3  | 483.0 | 387.6 | 0.668 | 5542 | 3140 | 83.10 | 6.7 |
| 95  | 23.76 | 23.01 | 546.1 | 436.2 | 0.723 | 5762 | 3402 | 82.50 | 6.4 |
| 100 | 23.69 | 27.44 | 649.5 | 511.5 | 0.804 | 6074 | 3797 | 81.10 | 6.0 |

MAD 5008 IPE 340KV FLUXER PRO 19x5.7 MATT AMPX 40A PRO (2-6S)

6S

MAX  
92°C

| Throttle [%] | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [gf] | Efficiency [%] | Temp. [°C] |
|--------------|-------------|-------------|-----------------|------------------|--------------|------|-------------|----------------|------------|
| 30           | 23.86       | 1.43        | 33.9            | 23.4             | 0.105        | 2128 | 460         | 71.90          | 14.1       |
| 35           | 23.85       | 2.01        | 47.6            | 34.6             | 0.136        | 2428 | 611         | 75.70          | 13.4       |
| 40           | 23.84       | 2.67        | 63.1            | 46.8             | 0.166        | 2696 | 750         | 77.10          | 12.3       |
| 45           | 23.81       | 4.15        | 98.1            | 77.2             | 0.233        | 3161 | 1075        | 81.30          | 11.3       |
| 50           | 23.79       | 5.44        | 129.0           | 102.7            | 0.282        | 3481 | 1309        | 82.40          | 10.5       |
| 55           | 23.76       | 6.81        | 161.2           | 129.4            | 0.328        | 3770 | 1531        | 82.80          | 9.8        |
| 60           | 23.73       | 8.36        | 197.7           | 160.3            | 0.378        | 4049 | 1789        | 83.60          | 9.3        |
| 65           | 23.71       | 9.96        | 235.6           | 190.7            | 0.425        | 4282 | 2027        | 83.40          | 8.9        |
| 70           | 23.68       | 11.73       | 277.3           | 225.4            | 0.474        | 4543 | 2223        | 83.60          | 8.3        |
| 75           | 23.64       | 13.73       | 324.3           | 263.3            | 0.526        | 4778 | 2459        | 83.50          | 7.8        |
| 80           | 23.6        | 15.86       | 373.7           | 302.7            | 0.577        | 5013 | 2734        | 83.00          | 7.5        |
| 85           | 23.56       | 18.19       | 428.0           | 344.9            | 0.630        | 5230 | 2995        | 82.50          | 7.2        |
| 90           | 23.52       | 20.66       | 485.4           | 389.1            | 0.682        | 5451 | 3266        | 81.90          | 6.9        |
| 95           | 23.47       | 23.38       | 548.2           | 436.0            | 0.736        | 5656 | 3537        | 81.10          | 6.6        |
| 100          | 23.4        | 27.73       | 648.3           | 508.6            | 0.816        | 5953 | 3924        | 79.80          | 6.2        |

The above data are the theoretical values when the input voltage is 24 V, for reference only. In the case of room temperature of 25°C and no additional cooling device, the current over 28A is non-working zone, 10-28A is short-term (about 10-30s), working zone, and below 10A is sustainable working zone. In actual use, please control the motor running time according to the working environment temperature and heat dissipation conditions.

# 5008

## ENERGY EFFICIENT 400KV

### INDUSTRY PROFESSIONAL EDITION

1.5~2.0 kgf

RECOMMENDED  
HOVER THRUST

4.1 kgf

MAXIMUM  
THRUST

MAXIMUM THRUST MAY DEPEND ON  
BATTERY LEVEL, PROPELLER TYPE,  
AIR PRESSURE, AND OTHER CONDITIONS

OPTIMIZED  
WEIGHT 141 g

EFFICIENCY >79%



MAD 5008 IPE 400KV FLUXER PRO 17x5.8 MATT AMPX 40A PRO (2-6S)

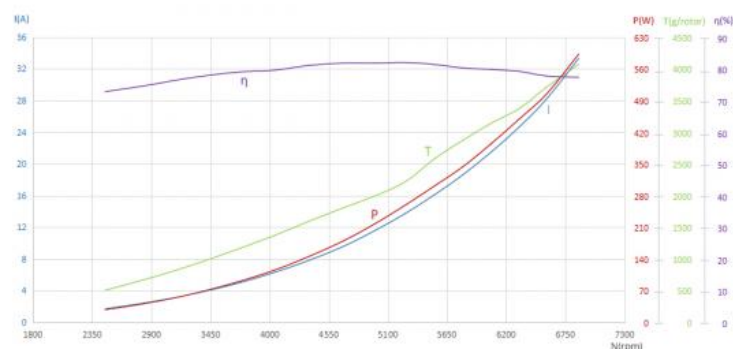
6S

MAX  
88°C

Analytical Graph of Motor Operation

I - Current, P - Input Power,  $\eta$  - Electrical Efficiency, T - Thrust, N - Rotational Speed

The data above was measured with an input voltage of 24 V, at a temperature of 25°C and sea level. The rotational speed was adjusted by the throttle.



Specifications

|                     |   |                              |                          |
|---------------------|---|------------------------------|--------------------------|
| RPM/V               | 400 KV  | Nominal Voltage              | 6S lipo battery          |
| No Load Current     | 1.35A / 20V   | Internal resistance          | 44.5mΩ                   |
| Motor Weight        | 141 g   | Product Boxed Weight         | 304g (110 x 110 x 50 mm) |
| Maximum Current     | 33.3 A  | Maximum Power                | 776.8W                   |
| Maximum thrust      | 4.1 kg  | Maximum Torque               | 0.82 Nm                  |
| Recommended ESC     | MAD AMPX PRO 40A (2-6S)                                       | Recommended Propellers       | 16x5.4, 17x5.8           |
| UAV take-off weight | 6S-177 7kg--Quadcopter<br>10.5kg--Hexacopter 14kg--Octocopter | Single rotor take-off weight | 1.5kg ~ 2kg              |

MAD 5008 IPE 400KV FLUXER PRO 16x5.4 MATT AMPX 40A PRO (2-6S)

6S

MAX  
75°C

| Throttle [%] | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [g] | Efficiency [%] | Temp. [°C] |
|--------------|-------------|-------------|-----------------|------------------|--------------|------|------------|----------------|------------|
| 30           | 24.02       | 1.46        | 34.9            | 22.1             | 0.084        | 2528 | 391        | 63.50          | 11.2       |
| 35           | 23.99       | 2.14        | 51.0            | 34.4             | 0.113        | 2922 | 544        | 69.60          | 11.0       |
| 40           | 23.98       | 3.05        | 72.8            | 52.3             | 0.150        | 3344 | 725        | 74.90          | 10.4       |
| 45           | 23.97       | 4.09        | 97.6            | 72.3             | 0.186        | 3721 | 921        | 77.20          | 9.8        |
| 50           | 23.94       | 5.33        | 127.0           | 95.8             | 0.223        | 4098 | 1119       | 78.50          | 9.2        |
| 55           | 23.92       | 6.44        | 153.5           | 116.5            | 0.254        | 4381 | 1275       | 78.90          | 8.6        |
| 60           | 23.9        | 7.89        | 188.1           | 145.2            | 0.294        | 4724 | 1482       | 80.20          | 8.2        |
| 65           | 23.87       | 9.5         | 226.3           | 178.3            | 0.336        | 5067 | 1686       | 81.80          | 7.7        |
| 70           | 23.84       | 11.31       | 269.1           | 211.9            | 0.378        | 5356 | 1916       | 81.70          | 7.4        |
| 75           | 23.81       | 13.25       | 315.0           | 247.4            | 0.419        | 5635 | 2129       | 81.30          | 7.0        |
| 80           | 23.77       | 15.61       | 370.2           | 291.7            | 0.469        | 5940 | 2390       | 81.40          | 6.7        |
| 85           | 23.73       | 17.7        | 419.8           | 328.9            | 0.504        | 6235 | 2577       | 80.80          | 6.3        |
| 90           | 23.68       | 20.48       | 484.4           | 381.5            | 0.560        | 6506 | 2851       | 81.10          | 6.1        |
| 95           | 23.63       | 23.41       | 552.8           | 435.1            | 0.612        | 6790 | 3130       | 80.80          | 5.8        |
| 100          | 23.55       | 27.84       | 655.0           | 511.3            | 0.685        | 7126 | 3504       | 79.90          | 5.5        |

**MAD 5008 IPE 400KV**
**FLUXER PRO 17x5.8 MATT**
**AMPX 40A PRO (2-6S)**

**6S**
MAX 88°C

| Throttle [%] | Voltage [V] | Current [A] | Input Power [W] | Output Power [W] | Torque [N·m] | RPM  | Thrust [g] | Efficiency [%] | Temp. [°C] |
|--------------|-------------|-------------|-----------------|------------------|--------------|------|------------|----------------|------------|
| 30           | 23.87       | 1.69        | 40.0            | 27.7             | 0.107        | 2472 | 504        | 72.80          | 13.2       |
| 35           | 23.85       | 2.41        | 56.9            | 40.8             | 0.138        | 2827 | 668        | 74.60          | 12.2       |
| 40           | 23.84       | 3.42        | 80.8            | 59.9             | 0.177        | 3235 | 877        | 77.00          | 11.3       |
| 45           | 23.81       | 4.84        | 114.8           | 87.6             | 0.227        | 3680 | 1139       | 78.90          | 10.3       |
| 50           | 23.79       | 6.3         | 149.6           | 115.2            | 0.272        | 4046 | 1371       | 79.60          | 9.5        |
| 55           | 23.76       | 7.84        | 185.8           | 145.9            | 0.319        | 4371 | 1597       | 81.10          | 8.9        |
| 60           | 23.73       | 9.6         | 227.3           | 180.2            | 0.367        | 4689 | 1808       | 81.80          | 8.2        |
| 65           | 23.69       | 11.56       | 273.4           | 217.3            | 0.417        | 4976 | 1992       | 81.80          | 7.5        |
| 70           | 23.65       | 13.74       | 324.5           | 258.8            | 0.470        | 5261 | 2217       | 82.00          | 7.0        |
| 75           | 23.61       | 16.08       | 379.0           | 300.8            | 0.520        | 5530 | 2578       | 81.40          | 7.0        |
| 80           | 23.57       | 18.6        | 437.9           | 343.2            | 0.566        | 5793 | 2869       | 80.30          | 6.7        |
| 85           | 23.51       | 21.59       | 507.2           | 396.2            | 0.624        | 6067 | 3148       | 79.80          | 6.3        |
| 90           | 23.46       | 24.68       | 578.3           | 449.3            | 0.679        | 6321 | 3375       | 79.20          | 6.0        |
| 95           | 23.41       | 28.06       | 656.1           | 502.2            | 0.731        | 6565 | 3699       | 77.80          | 5.7        |
| 100          | 23.32       | 33.33       | 776.8           | 592.6            | 0.823        | 6873 | 4072       | 77.30          | 5.3        |

The above data are the theoretical values when the input voltage is 24 V, for reference only. In the case of room temperature of 25°C and no additional cooling device, the current over 33A is non-working zone, 12-33A is short-term (about 10-30s), working zone, and below 12A is sustainable working zone. In actual use, please control the motor running time according to the working environment temperature and heat dissipation conditions.

## Our Services

1. We provide 1 Year Warranty. Buy with confidence.
2. If you are not satisfied when you receive your item, please return it within 14 days for a replacement or money back. Please contact me before you return it.
3. If item is defective in 3 months, We will send you a replacement without extra charger, or offer refund after we receive the defective item.
4. If item is defective after 3 months, you can still send it back to us. We will send you a new one after receiving the defective item. But you have to pay the extra shipping fee.



## FAQ

- Q1: Do you support OEM/ODM?  
A1: Yes. We can print your logo on the product.  
Q2: About samples.  
A2: Under normal circumstances, samples will be ready within 7 days, and 10-20 days for OEM/ODM orders. Sample fee and shipping will be charged.  
Q3: What is the delivery time?  
A3: For regular orders, we can ship within 15 days, for OEM/ODM, we can ship within 25-45 days (depending on the quantity). In the event of delays, we will notify you in advance of the status and resolution.  
Q4: What is the minimum order quantity?  
A4: There is no MOQ for wholesale (1 piece accepted), including OEM/ODM.  
Q5: What are your payment terms?  
A5: L/C.TT100%.  
Q6: Can you reduce the shipping cost?

A6: When calculating the shipping cost for you, we always choose the cheapest and safest express. Although we have partnerships with shipping companies, we can't keep costs down because it's not us who get paid. If you think it's expensive for you. You can always make your own choice.

Q7: Return policy.

A7: If you want to replace the received item, you must contact us within 7 days after receiving the item. Returned items should be in their original condition and you should pay for additional shipping.



**Guangzhou Gesai Intelligent Electronic Technology Co., Ltd.**



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