

# 2807-1300KV

## HIGH-PERFORMANCE BRUSHLESS MOTOR

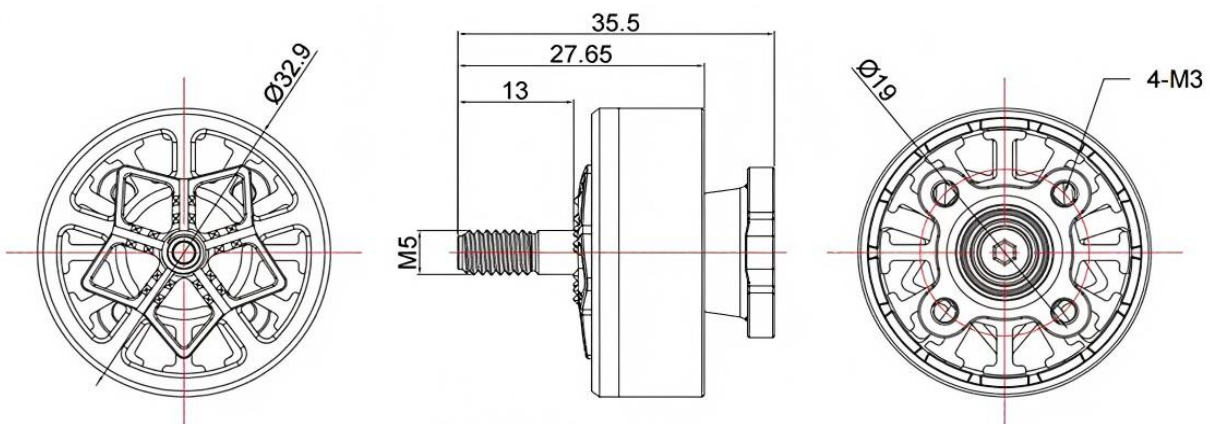
Application: 7-Inch Long Range FPV

### Engineering Drawing Overview

Specification	Value
Bell Diameter	Ø32.9 mm
Total Height	35.5 mm
Shaft Thread	M5
Mounting Pattern	19×19 mm (4-M3)

### Basic Parameters

Parameter	Value	Parameter	Value
KV Value	1300	Configuration	12N14P
Shaft Diameter	5mm	Silicone Wire	18#
Motor Weight	55g	Internal Resistance	72mΩ
Working Voltage	6S (Lipo)	Idle Current (10V)	1.1A
Maximum Power	1139.30 W	Maximum Current	46.50 A



## Performance Test Data (6S Voltage)

---

### Propeller: DBone 7045 3-Blade

Throttle (%)	Voltage (V)	Current (A)	Speed (RPM)	Thrust (gf)	Power (W)	Efficiency (gf/W)
40%	25.20	6.30	12270	597.23	158.8	3.76
50%	25.20	13.50	13157	916.45	340.2	2.69
60%	25.10	16.80	15754	1075.30	421.7	2.55
70%	25.00	20.77	18006	1553.36	519.3	2.99
80%	24.80	27.41	19392	1853.36	679.7	2.73
90%	24.70	34.92	22594	2156.30	862.4	2.50
<b>100%</b>	<b>24.50</b>	<b>45.15</b>	<b>23341</b>	<b>2456.90</b>	<b>1106.2</b>	<b>2.22</b>

### Propeller: GF7040 3-Blade

Throttle (%)	Voltage (V)	Current (A)	Speed (RPM)	Thrust (gf)	Power (W)	Efficiency (gf/W)
40%	25.21	5.90	11170	548.12	148.7	3.69
50%	25.18	12.50	12157	823.34	314.8	2.62
60%	25.03	15.80	15084	997.32	395.5	2.52
70%	25.00	19.77	17606	1415.67	494.3	2.86
80%	24.45	24.41	18992	1685.45	596.8	2.82
90%	24.00	32.92	21594	1947.38	790.0	2.47
<b>100%</b>	<b>24.00</b>	<b>43.96</b>	<b>22341</b>	<b>2367.50</b>	<b>1055.0</b>	<b>2.24</b>

### Propeller: HQ 7040 3-Blade

Throttle (%)	Voltage (V)	Current (A)	Speed (RPM)	Thrust (gf)	Power (W)	Efficiency (gf/W)
40%	25.20	5.67	11560	522.92	142.9	3.66
50%	25.20	12.70	13056	851.34	320.0	2.66
60%	25.10	15.80	14854	1083.05	396.6	2.73
70%	25.00	17.77	17786	1442.96	444.3	3.25
80%	24.80	25.41	18532	1647.18	630.1	2.61
90%	24.70	31.82	21459	1829.23	785.9	2.33
<b>100%</b>	<b>24.20</b>	<b>43.87</b>	<b>21949</b>	<b>2353.13</b>	<b>1061.7</b>	<b>2.22</b>

\* Technical specifications are based on manufacturer's lab environment testing. Actual performance may vary.