



APM60

SPARROW SERIES

KEY FEATURES



Superior quality insulation provides long life and high reliability of windings



Ultra-light, efficient, and long flight time



Built for industrial strength



Fully tested



DATASHEET

Fly Higher. Fly Longer. Fly Smarter.

ePropelled USA-made brushless propulsion motors (PMs), with outstanding thrust-to-weight ratios, drive a wide range of uncrewed aerial vehicles (UAVs) applications where weight, size, energy efficiency, high heat tolerance, and rugged quality count most.

For new UAV designs or easy replacement uses, ePropelled Sparrow PMs are designed from years of experience in magnetic engineering and materials science to deliver long life with ease of installation. When paired with our air motor controllers, gain high-performance, high-efficiency propulsion solutions for all manner of medium-duty UAV designs.

Air Propulsion Motor

The frameless Sparrow APM60 delivers the thrust agility to drive demanding payload UAVs with precise control across dynamic mission parameters in demanding thermal environments.

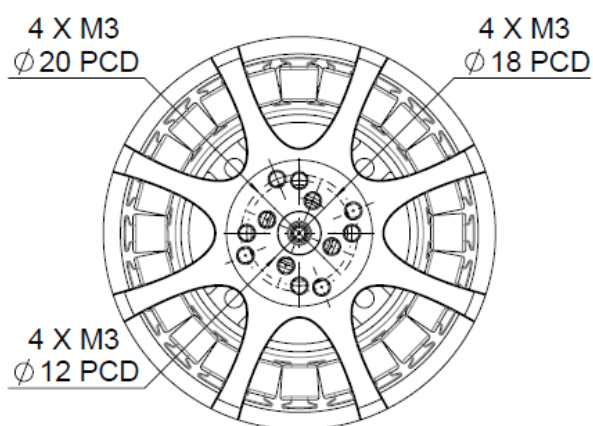
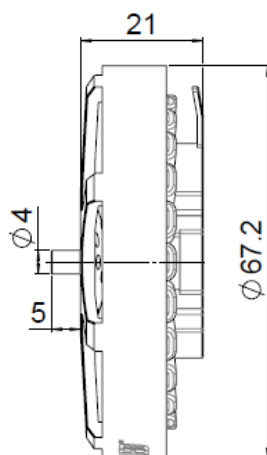
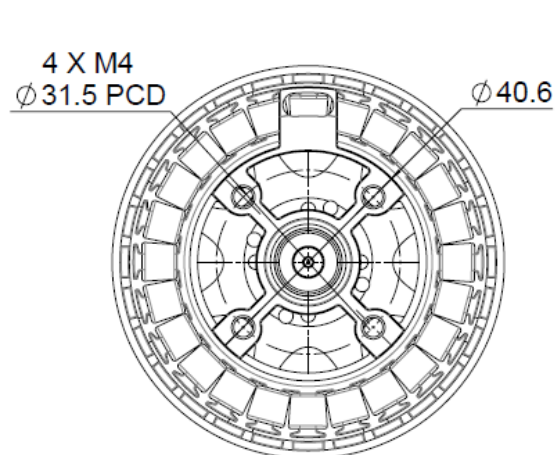
They make an excellent choice to swap out commodity PMs and attain better performance, greater life, longer range, and far higher operational integrity.

Compact and stingy on energy demand, the medium-duty APM60s have a proven record of durability, reliability, and easily optimized performance across most mainstream UAV uses.



MOTOR PARAMETERS

PARAMETER	MEASUREMENT
Kv (Velocity Constant)	320 RPM/V
Rated Voltage	6s(LiPo)
Peak Current (180s)	29A
Maximum Power (180s)	696W
Internal Resistance	47.5mΩ
Nominal Operational Speed	0 to 5,000 RPM
Maximum Speed Limit	6,000 RPM
Magnetic Poles	28
Stator Slots	24
Winding Operating Temperature Allowed up to	180°C/356°F
Rotor Operating Temperature Allowed up to	150°C/302°F
Motor Diameter	67.2mm
Motor Length	21mm
Motor Weight	159g
Motor Mounting Pitch Circle Diameter (PCD) 4 x M4	31.5mm
Propeller Mounting Pitch Circle Diameter (PCD)	Adapter dependent
IP Rating	IP25
Recommended Propeller	18 to 19inch
Recommended ESC	AMC40 series

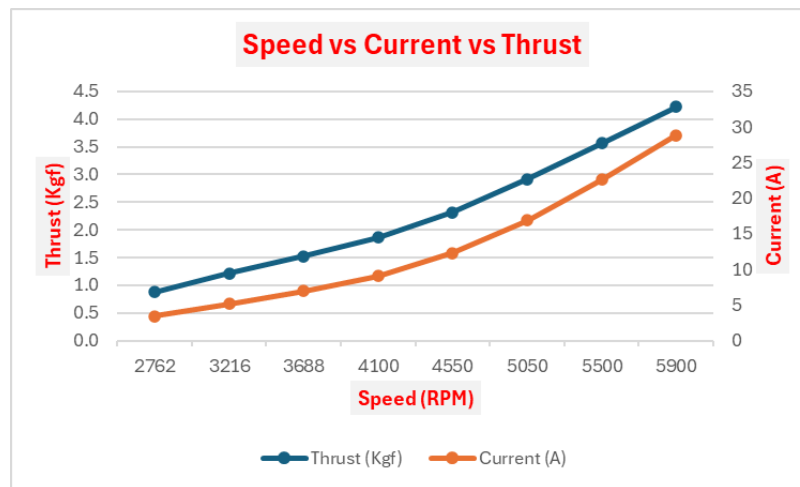
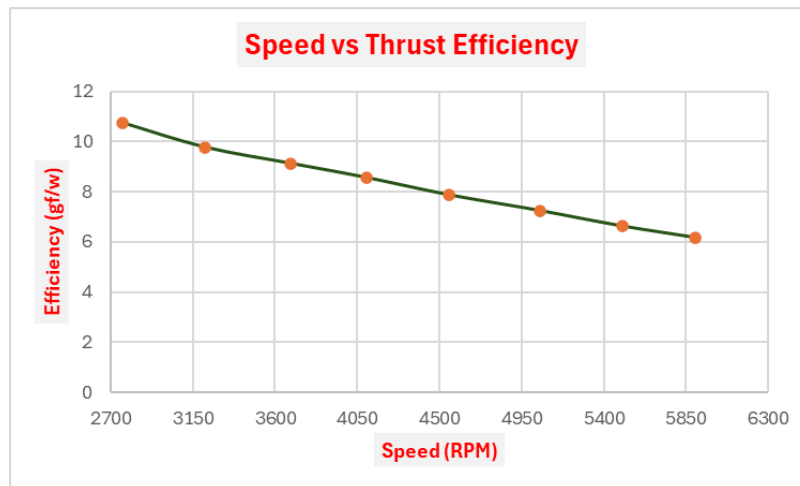
PROPELLER MOUNTING
HOLE PATTERNMOTOR MOUNTING
HOLE PATTERN

*All Dimensions are in mm

PERFORMANCE DATA: APM60 KV320 (18.5" x 6.3")

MOTOR	APM60 KV320
Relative Humidity (%)	42
Ambient Temperature ©	26
Atmospheric Pressure (mB)	1013.20
Air Density (kg/m ³)	1.184

TYPE	PROPELLER	VOLTAGE	THROTTLE	MOTOR SPEED	SUPPLY CURRENT	ELECTRICAL POWER	THRUST	THRUST EFFICIENCY
		VOLTS	%	RPM	AMPS	WATT	KGF	GF/W
APM60	18.5" x 6.3"	24	30	2762	3.4	82	0.88	10.7
			40	3216	5.2	124	1.21	9.8
			50	3688	7.0	167	1.52	9.1
			60	4100	9.1	217	1.86	8.6
			70	4550	12.3	294	2.32	7.9
			80	5050	16.9	403	2.92	7.2
			90	5500	22.6	537	3.56	6.6
			100	5900	28.8	683	4.22	6.2



Note: All specifications are subject to change without notice. For more information, including ordering products, please contact us at info@epropelled.com | Phone: +1 (603) 236 7444