



APM 5010-Kv360

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 brushless air propulsion motors (APMs), 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 APMs 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 light- to medium-duty UAV designs.

Air Propulsion Motor

The frameless Sparrow APM 5010-Kv360 delivers the thrust agility to drive compact UAVs with precise control across dynamic mission parameters in demanding thermal environments.

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

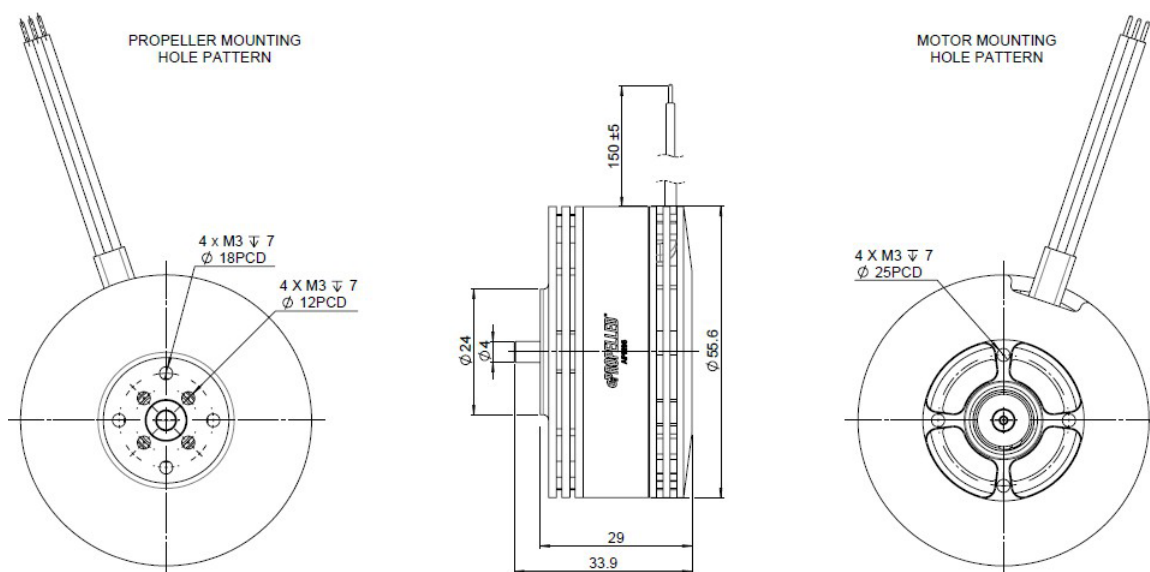
Compact and energy efficient on demand, the light- to medium-duty APM 5010-Kv360 have a proven record of durability, reliability, and easily optimized performance across most mainstream UAV uses.



MOTOR PARAMETERS

PARAMETERS	MEASUREMENT
Kv (Velocity Constant)	360 Kv
Rated Voltage	6S
Peak Current (180s)	38 A
Maximum Power (180s)	960 W
Internal Resistance	45 mΩ
Nominal Operational Speed	0 to 7,000 RPM
Maximum Speed Limit	8,000 RPM
Magnetic Poles	28
Stator Slots	24
Winding Operating Temperature Allowed up to	150°C/302°F
Rotor Operating Temperature Allowed up to	150°C/302°F
Motor Diameter	55.6 mm
Motor Length	33.9 mm
Motor Weight	175 g
Motor Mounting Pitch Circle Diameter (PCD) 4 x M3	25 mm
Propeller Mounting Pitch Circle Diameter (PCD)	Adaptor dependent
IP Rating	IP45
Recommended Propeller	17" to 18.5" inch
Recommended ESC	AMC 6S40A series

MECHANICAL DIMENSIONS

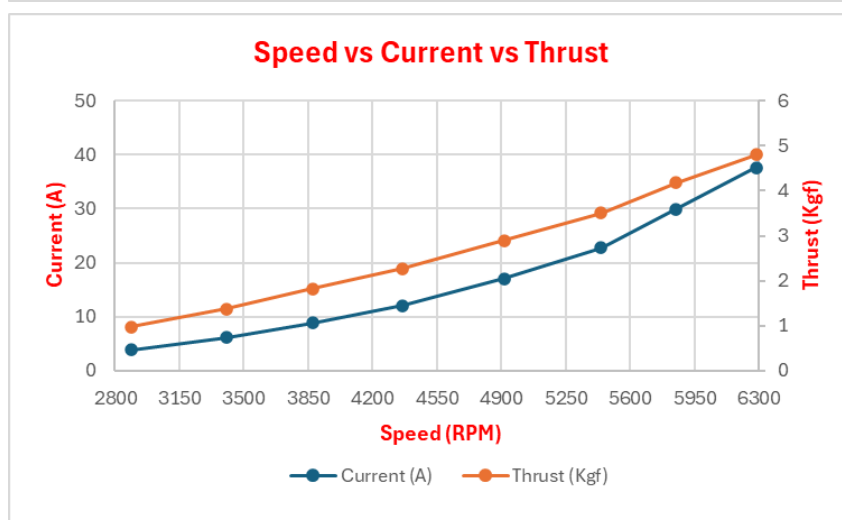
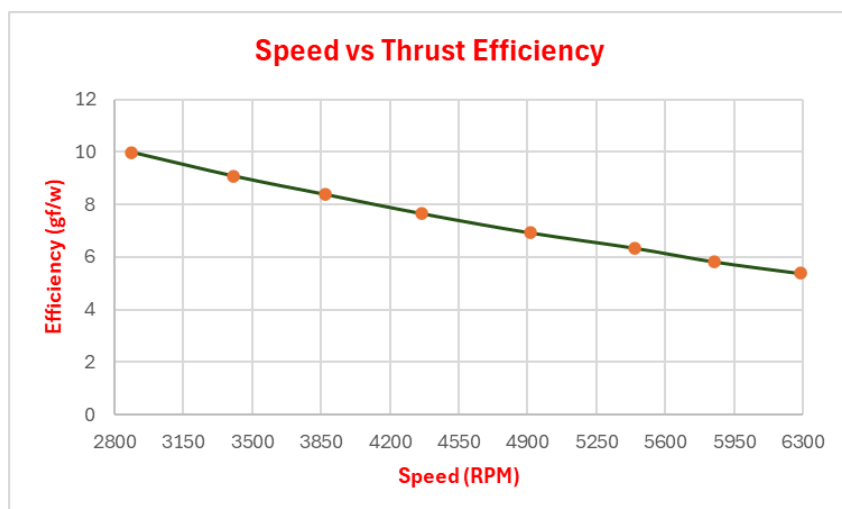


* All Dimensions are in mm.

PERFORMANCE DATA – APM 5010-Kv360 (18.5” x 6.3”)

Motor Test Conditions	APM 5010-Kv360
Relative Humidity (%)	65
Ambient Temperature °C	27
Atmospheric Pressure (mB)	1013
Air Density (kg/m ³)	1.18

TYPE	PROPELLER	VOLTAGE	THROTTLE	MOTOR SPEED	SUPPLY CURRENT	ELECTRICAL POWER	THRUST	THRUST EFFICIENCY
		VOLTS	%	RPM	AMPS	WATT	KGF	GF/W
APM 5010-Kv360	(18.5” x 6.3”)	24.9	30	2886	3.9	97	0.97	9.98
		24.8	40	3404	6.1	151	1.37	9.08
		24.7	50	3873	8.8	217	1.82	8.38
		24.6	60	4364	12.1	297	2.27	7.65
		24.4	70	4916	17.1	417	2.89	6.92
		24.2	80	5443	22.8	553	3.51	6.34
		24.0	90	5851	29.9	718	4.18	5.82
		23.7	100	6286	37.6	892	4.80	5.38



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

