



# APM95

## 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 light- to medium-duty UAV designs.

### Air Propulsion Motor

The frameless Sparrow APM95 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 PMs and attain better performance, greater life, longer range, and far higher operational integrity.

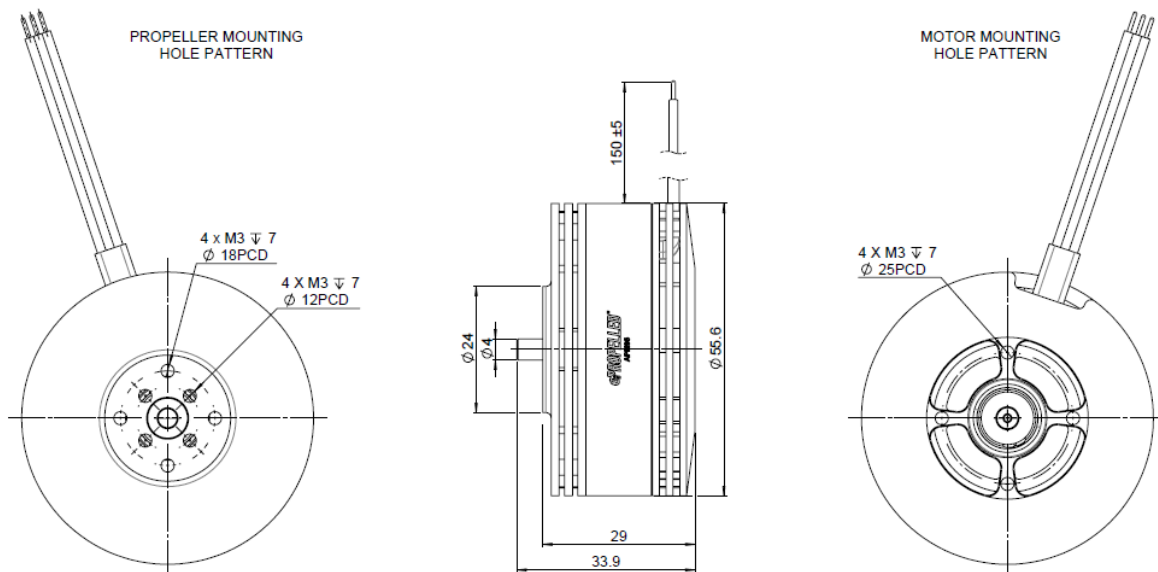
Compact and stingy on energy demand, the light- to medium-duty APM95 have a proven record of durability, reliability, and easily optimized performance across most mainstream UAV uses.



## MOTOR PARAMETERS

PARAMETER	MEASUREMENT
Kv (Velocity Constant)	360 RPM/V
Rated Voltage	6s(LiPo)
Peak Current (180s)	40A
Maximum Power (180s)	1000W
Internal Resistance	45mΩ
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	55.6mm
Motor Length	33.9mm
Motor Weight	175g
Motor Mounting Pitch Circle Diameter (PCD) 4 x M3	25mm
Propeller Mounting Pitch Circle Diameter (PCD)	Adapter dependent
IP Rating	IP45
Recommended Propeller	17 to 18inch
Recommended ESC	AMC40 series

## MECHANICAL DIMENSIONS

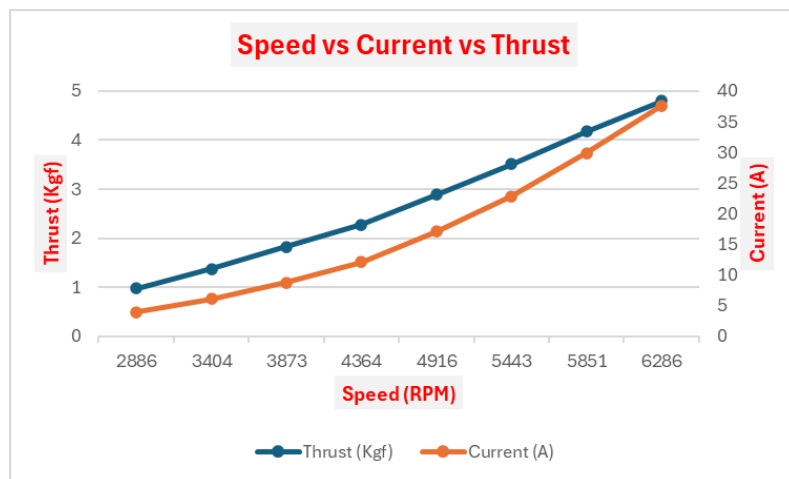
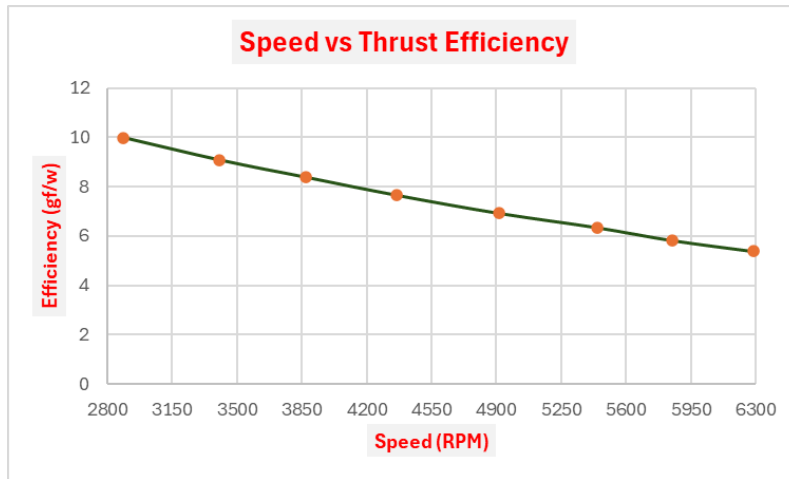


\* All Dimensions are in mm.

## PERFORMANCE DATA – APM95 Kv360 (18.5” x 6.3”)

<b>Motor</b>	<b>APM95 Kv360</b>
Relative Humidity (%)	65
Ambient Temperature ©	27
Atmospheric Pressure(mB)	1013.20
Air Density (kg/m <sup>3</sup> )	1.184

TYPE	PROPELLER	VOLTAGE	THROTTLE	MOTOR SPEED	SUPPLY CURRENT	ELECTRICAL POWER	THRUST	THRUST EFFICIENCY
		VOLTS	%	RPM	AMPS	WATT	KGF	GF/W
APM95	(18.5” x 6.3”)	24	30	2886	3.91	97.16	0.97	9.98
			40	3404	6.08	150.87	1.37	9.08
			50	3873	8.78	217.22	1.82	8.38
			60	4364	12.06	296.76	2.27	7.65
			70	4916	17.09	417.49	2.89	6.92
			80	5443	22.84	553.28	3.51	6.34
			90	5851	29.93	717.93	4.18	5.82
			100	6286	37.60	891.51	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](mailto:info@epropelled.com) | Phone: +1 (603) 236 7444