



APM 2207.5-Kv1950

SPARROW SERIES

KEY FEATURES



Superior quality insulation provides long life and high reliability of winding



Ultra-lightweight performance design



Enhanced durability & cooling



Dynamic response and control fidelity

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

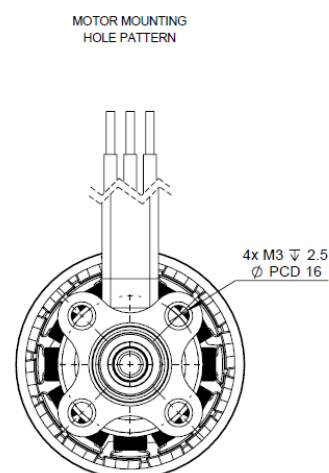
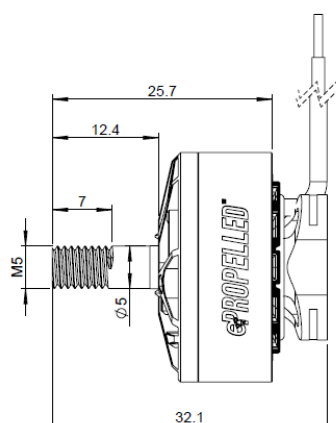
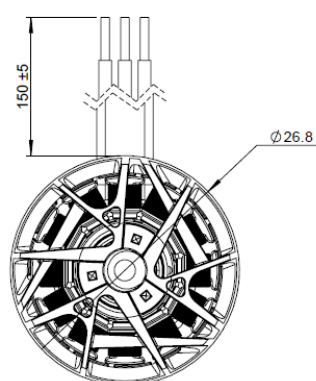
The APM2207.5-Kv1950 brushless motor combines high thrust density, efficiency, and precision for advanced FPV drones. Engineered for 5-inch light- to medium-duty platforms, it offers the perfect balance of power, control, and endurance, making it ideal for aggressive freestyle, racing, and smoother cinematic flight. Its optimized 2207.5 stator geometry and active heat dissipation ensure consistent torque and stable performance under demanding conditions. The lightweight aluminum construction and high-precision bearings deliver smooth, low-vibration operation crucial for precise control and high-quality footage.



MOTOR PARAMETERS

PARAMETERS	MEASUREMENT
Kv (Velocity Constant)	1950 Kv
Rated Voltage	3S – 6S
Peak Current (10s)	50A
Maximum Power (10s)	1240 W
Internal Resistance	70mΩ
Nominal Operational Speed	0 to 31,500 RPM
Maximum Speed Limit	32000 RPM
Magnetic Poles	14
Stator Slots	12
Winding Operating Temperature Allowed up to	150°C
Rotor Operating Temperature Allowed up to	150°C
Motor Diameter	26.8 mm
Motor Length	32.1 mm
Motor Weight	34 g
Motor Mounting Pitch Circle Diameter (PCD)	16 mm
Propeller Mounting	M5
IP Rating	IP25
Recommended Propeller	5” inch
Recommended ESC	Suitable controller 60A required

MECHANICAL DIMENSIONS

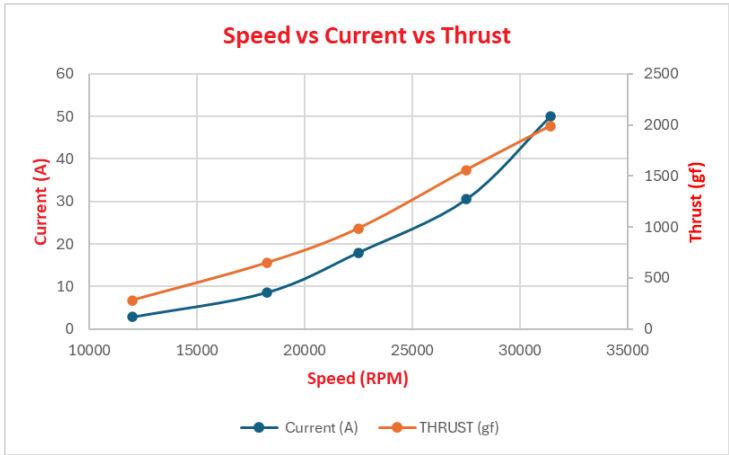
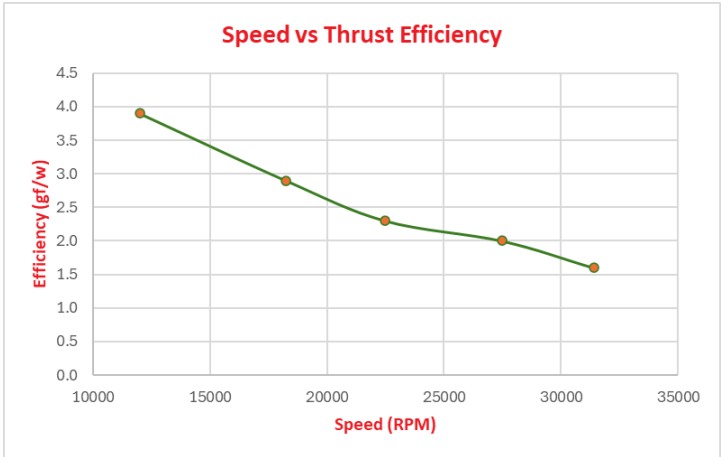


*All Dimensions are in mm.

PERFORMANCE DATA - APM 2207.5-Kv1950

Motor Test Conditions	APM 2207.5-Kv1950
Relative Humidity (%)	75
Ambient Temperature °C	24
Atmospheric Pressure (mB)	1015
Air Density (kg/m ³)	1.2

TYPE	PROPELLER	VOLTAGE	THROTTLE	MOTOR SPEED	SUPPLY CURRENT	ELECTRICAL POWER	THRUST	THRUST EFFICIENCY
		VOLTS	%	RPM	AMPS	WATT	gf	gf/w
APM 2207.5-Kv1950	5147-3	25.2	20	12000	2.8	70.5	280.4	3.9
		25.2	40	18250	8.6	216.7	648.6	2.9
		25	60	22500	17	425	985.9	2.3
		24.9	80	27500	30.5	759.5	1472.8	2.0
		24.8	100	31400	50	1240	1920.2	1.6



Note: The specifications and performance outlined above are subject to change in the final product. Furthermore, the performance data requires an update based on actual test results.

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

