



APM 1404-Kv2900

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.

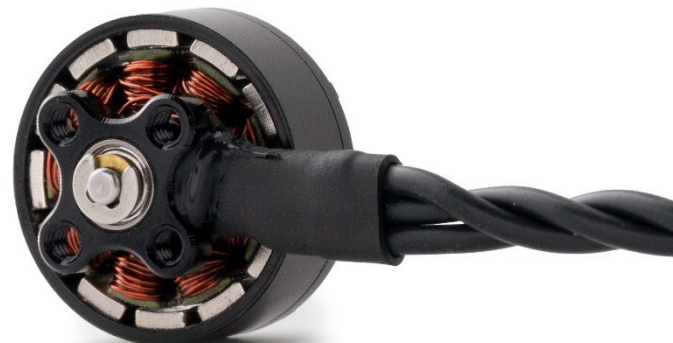
For new UAV designs or easy replacement uses, ePropelled Sparrow APMs are designed from years of experience in magnetic engineering and materials science to deliver long life with ease of installation. When paired with our air motor controllers, gain high-performance, high-efficiency propulsion solutions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

Air Propulsion Motor

The APM 1404-Kv2900 motor adopts an active heat dissipation design, maximizing the performance envelope for varying flight conditions and applications.

They make an excellent choice to swap out commodity APMs and attain better performance, greater life, longer range, and provide powerful propulsion, cinematic drones.

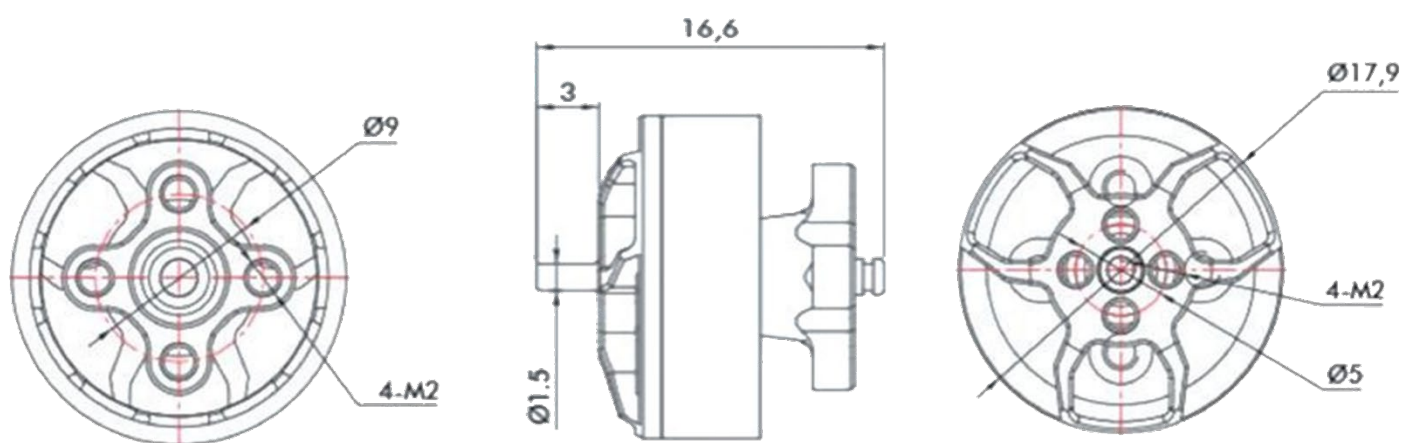
Compact and energy efficient on demand, the light- to medium-duty APM 1404-Kv2900 have a proven record of durability, reliability, and ensuring easy control for cinematic level shooting and a safe flight.



MOTOR PARAMETERS

PARAMETERS	MEASUREMENT
Kv (Velocity Constant)	2900 Kv
Rated Voltage	3S – 6S
Peak Current (180s)	10 A
Maximum Power (180s)	262 W
Internal Resistance	310mΩ
Nominal Operational Speed	0 to 36,000 RPM
Maximum Speed Limit	40,000 RPM
Magnetic Poles	12
Stator Slots	09
Winding Operating Temperature Allowed up to	150°C/302°F
Rotor Operating Temperature Allowed up to	150°C/302°F
Motor Diameter	17.9 mm
Motor Length	16.6 mm
Motor Weight (with leads)	10 g
Motor Mounting Pitch Circle Diameter (PCD) 4 x M2	09 mm
Propeller Mounting Pitch Circle Diameter (PCD)	Adaptor dependent
IP Rating	IP25
Recommended Propeller	3" – 4" inch

MECHANICAL DIMENSIONS

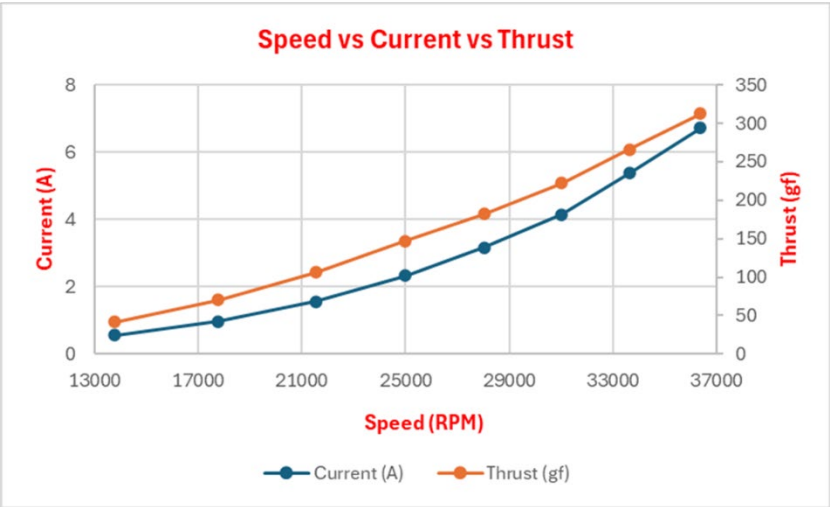
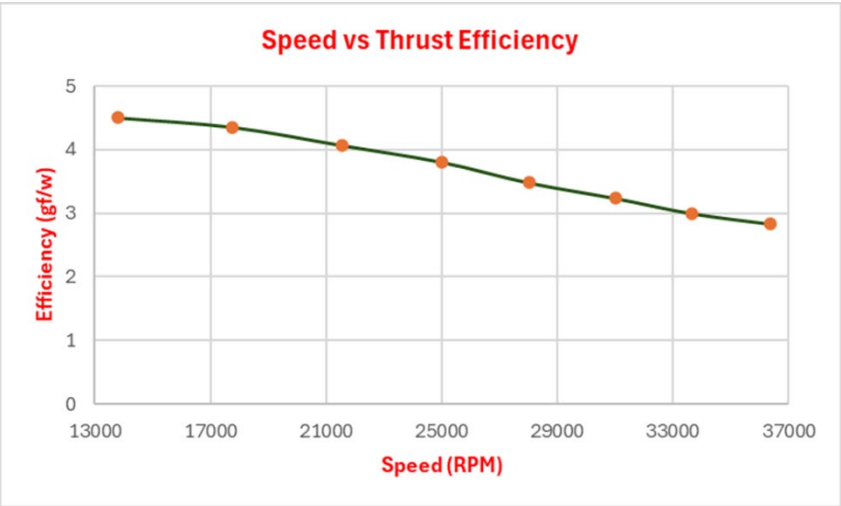


*All Dimensions are in mm.

PERFORMANCE DATA: APM 1404-Kv2900 (3028 -3)

Motor Test Conditions	APM 1404-Kv2900
Relative Humidity (%)	74
Ambient Temperature °C	24
Atmospheric Pressure (mB)	1015
Air Density (kg/m ³)	1.2

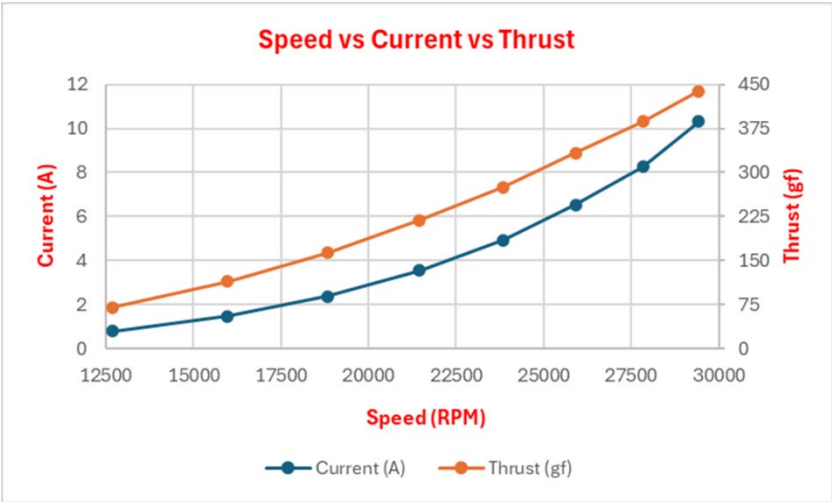
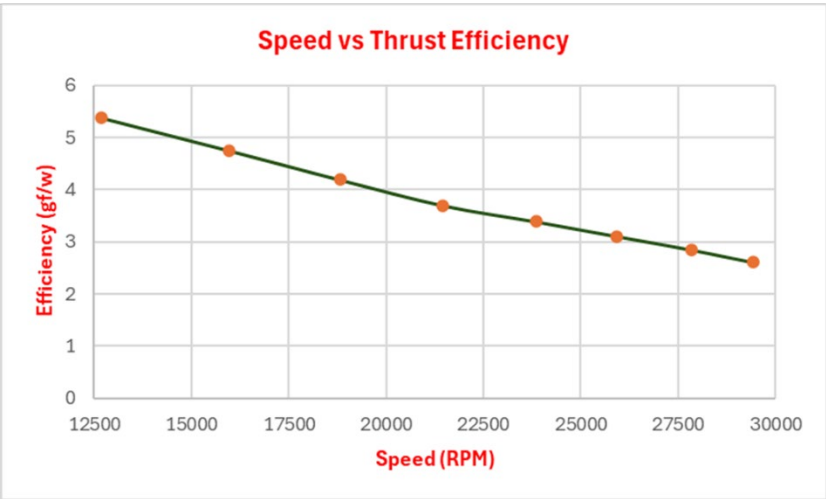
TYPE	PROPELLER	VOLTAGE	THROTTLE	MOTOR SPEED	SUPPLY CURRENT	ELECTRICAL POWER	THRUST	THRUST EFFICIENCY
		VOLTS	%	RPM	AMPS	WATT	GF	GF/W
APM 1404-Kv2900	(3028 -3)	16.7	30	13792	0.6	9	41.54	4.50
		16.6	40	17768	1.0	16	70.26	4.36
		16.6	50	21534	1.6	26	106.04	4.07
		16.6	60	24987	2.3	39	146.93	3.81
		16.6	70	28041	3.2	52	182.34	3.48
		16.5	80	31029	4.2	69	222.31	3.23
		16.4	90	33640	5.4	89	266.09	3.00
		16.4	100	36383	6.7	111	312.96	2.83



PERFORMANCE DATA: APM 1404-Kv2900 (4024 -2)

Motor Test Conditions	APM 1404-Kv2900
Relative Humidity (%)	74
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 1404 -Kv2900	(4024 -2)	16.7	30	12696	0.8	13	69.99	5.38
		16.6	40	15978	1.5	24	114.13	4.75
		16.6	50	18831	2.4	39	163.51	4.19
		16.6	60	21460	3.5	59	218.51	3.70
		16.5	70	23845	4.9	81	275.29	3.39
		16.4	80	25918	6.5	107	333.66	3.11
		16.3	90	27833	8.3	136	386.67	2.85
		16.2	100	29425	10.3	168	480	2.61



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

