

SUPERLIGHT 8008

110 kV

MOTOR SPECIFICATIONS

kV (Motor Velocity Constant)	110 RPM/V	Kt (Motor Torque Constant)	0.0836 Nm/A
Motor Weight	210 g (235 g with Wires)	Km (Motor Constant)	0.045 Nm/√(W)
Voltage Range	48 V (12S)	IP Rating	IP35
Rm (Winding Resistance)	0.2 Ω	Maximum Continuous Current*	22 A (180 s)
Bearings	Dual, 619/8-2Z (SKF)	Maximum Continuous Power*	1000 W (180 s)
Stator Class	8108, 0.2 mm Japanese Steel	Poles	36S 42P
Motor Advance Timing	15° - 30° (Programmable)	Motor Mount Pattern @ 90°	4xM3 ø30mm ↓ 6mm
Motor Drive Frequency	08 - 20 kHz	Shaft Diameter	ø8 mm Internal
Propeller Blade Size	26"... 30" (28" Recommended)	Motor Diameter	ø88.4 mm
Propeller Mount Pattern	4xM4 ø23mm ↓5mm 4xM3 ø20mm ↓5mm	Motor Length	26 mm

PERFORMANCE DATA

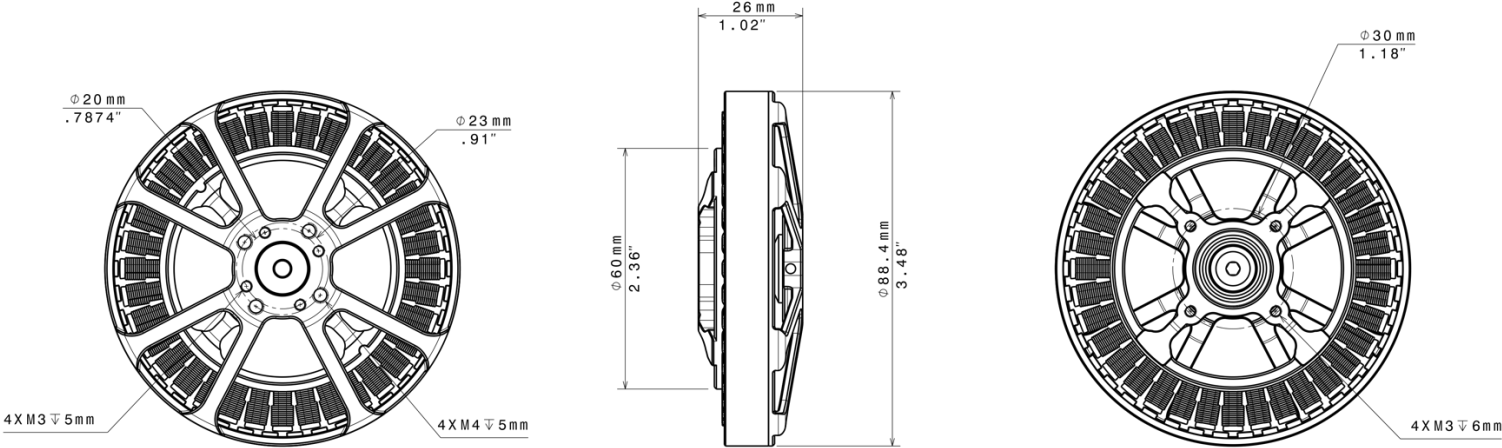
	Throttle (%)	PWM	Speed (RPM)	Current (A)	Voltage (V)	Thrust (Grams)	Torque (Nm)	Efficiency (GpW)	Motor Power (W)
MOTOR: SUPERLIGHT 8008 110 kV	20	1200	745	0.28	48.42	306	0.15	23.90	11.9
	25	1250	1005	0.59	48.36	524	0.25	20.80	27.3
	30	1300	1248	0.94	48.31	856	0.29	21.20	38.6
	35	1350	1455	1.56	48.25	1158	0.40	16.10	62.2
	40	1400	1707	2.20	48.20	1514	0.50	14.10	89.9
PROPELLER: 28" 9.2 CF FIXED	45	1450	1905	3.24	48.13	1859	0.63	12.30	127.1
	50	1500	2135	4.24	48.07	2301	0.75	11.40	167.2
	55	1550	2325	5.54	47.99	2730	0.86	10.40	210.6
	60	1600	2496	6.75	47.93	3102	0.98	9.70	257.0
	65	1650	2662	8.61	47.83	3648	1.17	8.90	330.1
ESC: 80A 12S	70	1700	2849	10.25	47.76	4180	1.30	8.30	389.2
	75	1750	2973	11.74	47.70	4436	1.39	8.00	432.6
	80	1800	3115	13.89	47.60	4952	1.57	7.50	519.7
BATTERY: 22000 mAh 48V	85	1850	3285	17.06	47.47	5605	1.75	7.10	609.0
	90	1900	3461	21.49	47.29	6196	1.93	6.30	701.1
	95	1950	3615	24.06	47.19	6506	2.03	5.70	761.5
DATE: 06/SEP/2023	100	2000	3729	28.92	47.00	7127	2.20	5.20	859.4

// Test Conditions // Place: Hyderabad, Altitude: 506 m, Temperature: +25°C, Wind: 5 mps, Pressure: 709 mmHg, Humidity: 87%, Precipitation: 3.04 mm

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ASSEMBLY DRAWING



Front view
Scale: 1:1

Left view
Scale: 1:1

Rear view
Scale: 1:1