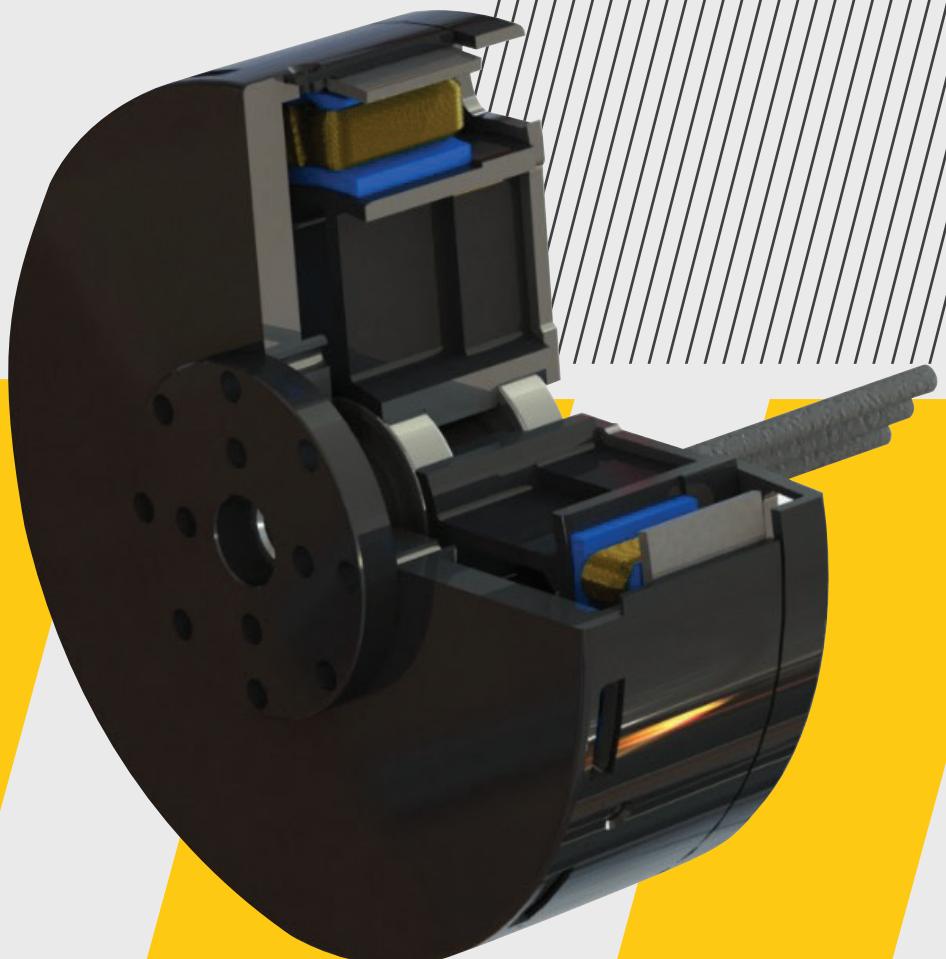




PRODUCT CATALOGUE





COMPANY PROFILE

Welkinrim, is an IIT Madras Incubated startup, ideated by four professionals with expertise in the field of power electronics, motor design and motor controllers. Incorporated in 2018 offering services to various startups and listed companies, Welkinrim has grew to a team of 16 and now embarked on producing cutting edge indigenous propulsion systems for aerial drones. Our journey is driven by a collective passion for innovation and excellence in drone technology and propulsion systems. Through thorough market analysis, we pivoted our focus towards drone propulsion systems, accelerating our production with the support of our experienced and passionate team.

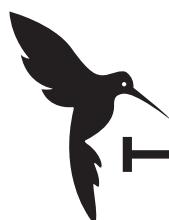


Welkinrim, takes scientific, world-class engineering and manufacturing processes to develop world's efficient and reliable propulsion systems. we embrace rigorous testing and iterative refinements, ensuring every product meets high standards of efficiency, reliability, and safety. We continuously refine our designs based on market feedback and technological breakthroughs, enhancing our offerings and strengthening our position as trailblazers in indigenous UAV propulsion system.

We are currently developing products that reflect our commitment to technological advancement and superior performance in each stage, we integrate the latest technological advancements in our propulsion systems to meet the dynamic demands of the UAV market.



AERIAL DRONE PROPULSION SYSTEMS



HÆMNING



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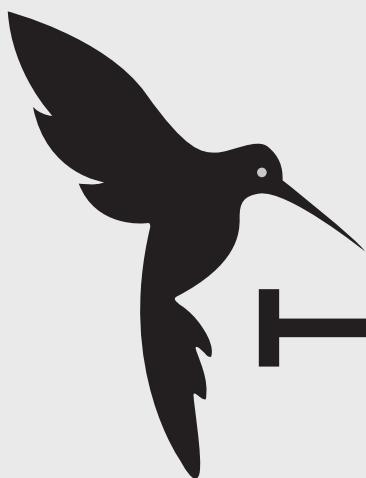


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HÆMNG



High temperature resistant copper windings



Aerospace grade aluminum



Dust resistant & Waterproof



Efficient centrifugal cooling



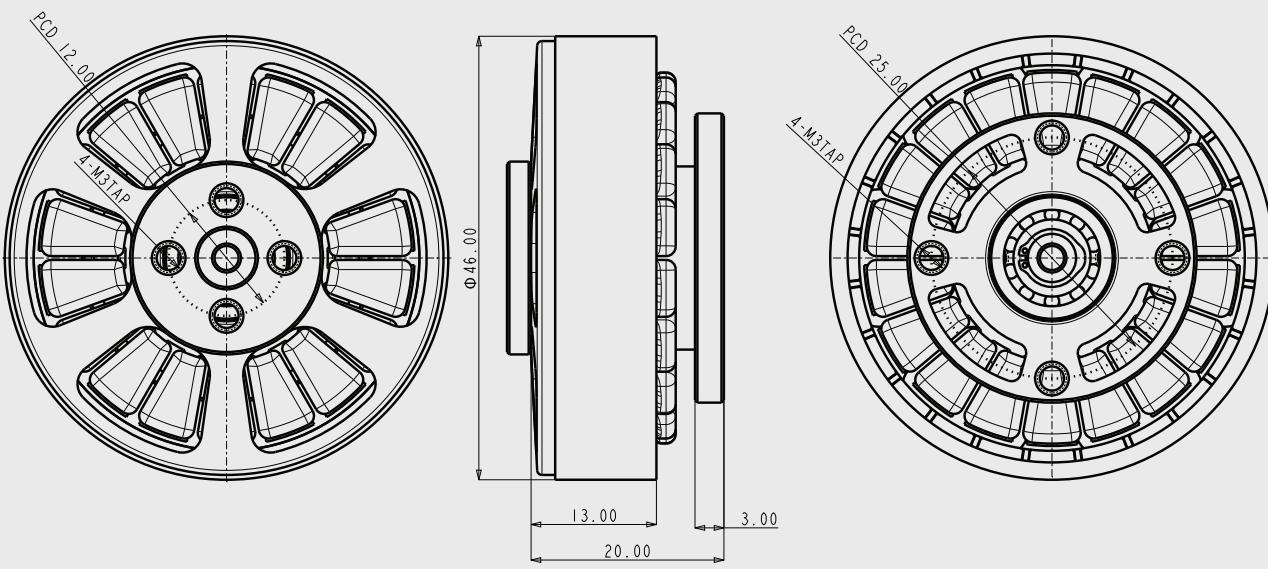
Extended peak thrust



Improved operating point efficiency

Motor Specifications

KV Rating	KV380	Peak Thrust	1200g
Rated Voltage(LiPo)	6S	Recommended Propeller	13x4.4 inch
Peak Current	10A	Dimension	Φ46x20 mm
Recommended Thrust	350g	Weight	86 g



PERFORMANCE DATA

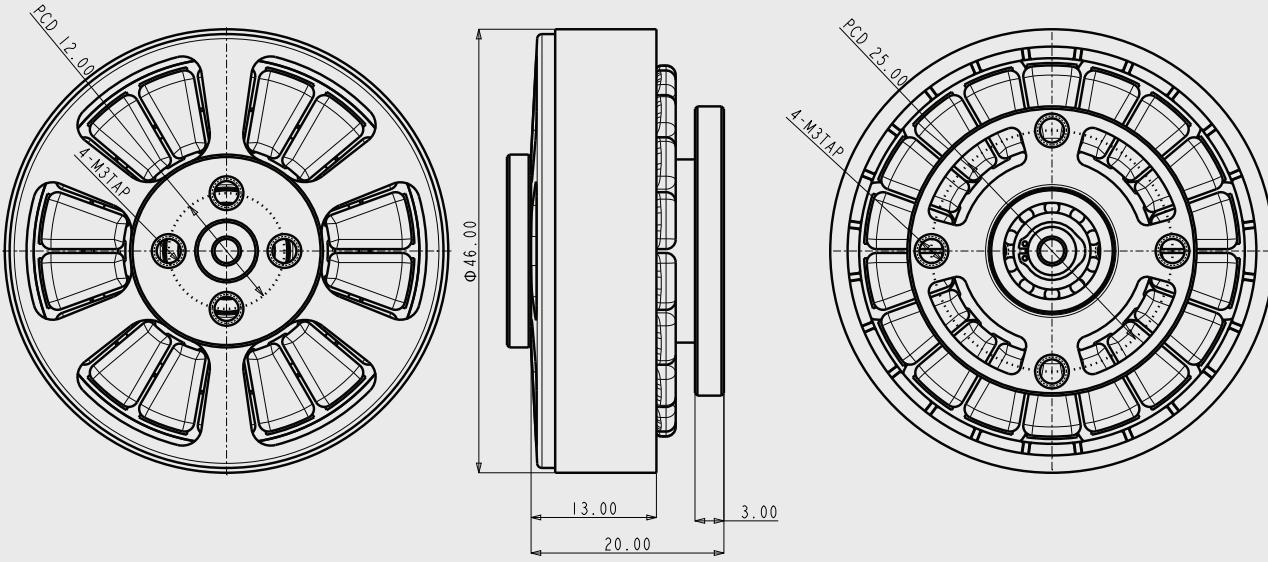
Propeller: 13x4.4" | ESC: F30, 6S | Power Source: LiPO 6S

Throttle (%)	Voltage(V)	Current(A)	Power(W)	Thrust(g)	Speed(RPM)	Efficiency(g/W)
30	24.94	0.40	9.93	151	2493	15.21
35	24.92	0.58	14.45	206	2819	14.25
40	24.90	0.70	17.43	243	3109	13.94
45	24.88	0.95	23.64	293	3393	12.40
50	24.85	1.29	32.06	362	3705	11.29
55	24.81	1.47	36.47	405	3991	11.10
60	24.76	1.83	45.31	498	4293	10.99
65	24.67	2.25	55.51	565	4593	10.18
70	24.61	2.60	63.99	631	4903	9.86
75	24.56	3.09	75.89	708	5154	9.33
80	24.51	3.71	90.93	781	5440	8.59
90	24.36	5.32	129.60	1003	6064	7.74
100	24.18	8.42	203.60	1204	6624	5.91

The above bench test data are for reference only and tested at ambient room temperate at MSL. Actual data might vary based on environmental and field conditions.

Motor Specifications

KV Rating	KV380	Peak Thrust	1650g
Rated Voltage(LiPo)	6S	Recommended Propeller	15x5 inch
Peak Current	16 A	Dimension	Φ46x20 mm
Recommended Thrust	550g	Weight	86 g



PERFORMANCE DATA

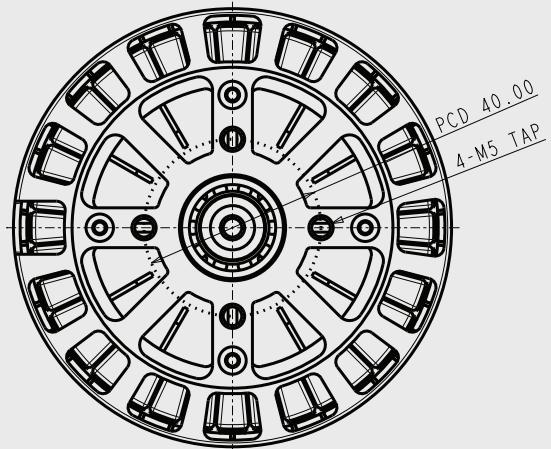
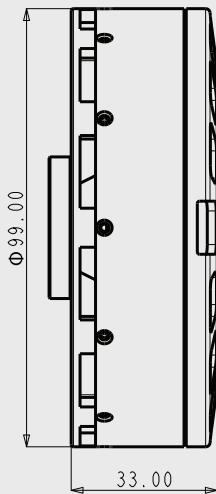
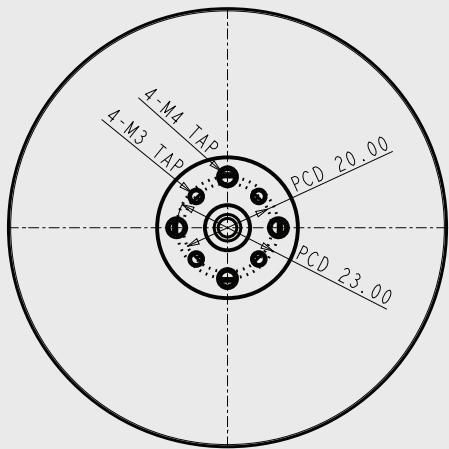
Propeller: 15x5" | ESC: F30, 6S | Power Source: LiPO 6S

Throttle (%)	Voltage(V)	Current(A)	Power(W)	Thrust(g)	Speed(RPM)	Efficiency(g/W)
30	24.87	0.76	18.95	231	2267	12.19
35	24.85	1.00	24.95	299	2544	11.98
40	24.82	1.27	31.52	369	2789	11.71
45	24.77	1.64	40.62	450	3064	11.08
50	24.73	2.02	50.05	523	3298	10.45
55	24.67	2.52	62.17	631	3567	10.15
60	24.60	3.18	78.23	751	3860	9.60
65	24.53	3.87	94.93	823	4111	8.67
70	24.45	4.74	115.89	951	4351	8.21
75	24.34	5.90	143.61	1085	4627	7.56
80	24.24	7.01	169.92	1204	4937	7.09
90	23.97	9.67	231.79	1484	5424	6.40
100	23.73	15.91	377.54	1650	5734	4.37

The above bench test data are for reference only and tested at ambient room temperate at MSL. Actual data might vary based on environmental and field conditions.

Motor Specifications

KV Rating	KV100	Peak Thrust	11.7 kg
Rated Voltage(LiPo)	12S	Recommended Propeller	28x9.2 inch
Peak Current	50 A	Dimension	Φ99x33 mm
Recommended Thrust	5 kg	Weight	560 g



PERFORMANCE DATA

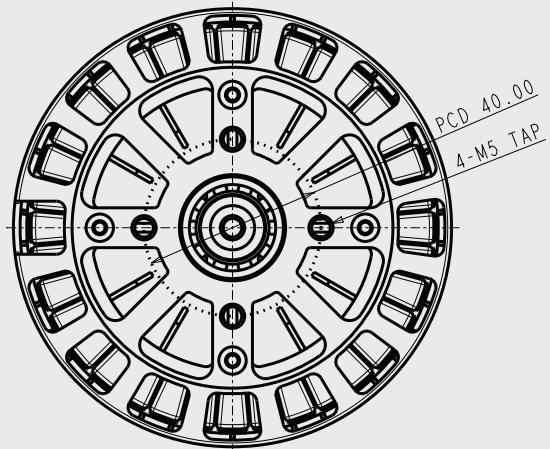
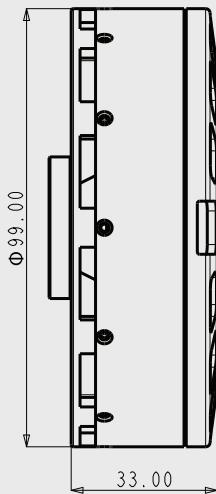
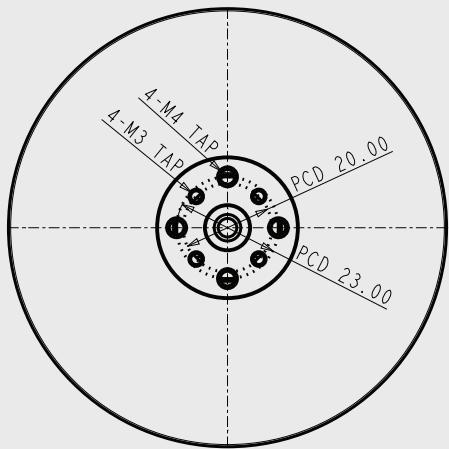
Propeller: 28x9.2" | ESC: E60, 12S | Power Source: LiPO 12S

Throttle (%)	Voltage(V)	Current(A)	Power(W)	Thrust(Kg)	Speed(RPM)	Efficiency(g/W)
30	50.02	3.68	184.22	1.68	1775	9.11
35	49.88	5.19	259.17	2.3	2045	8.87
40	49.71	6.92	344.04	2.98	2295	8.66
45	49.60	8.73	433.35	3.62	2573	8.35
50	49.38	10.84	535.27	4.38	2721	8.18
55	49.22	13.22	650.68	5.12	2925	7.86
60	48.98	15.89	778.29	5.88	3114	7.55
65	48.77	19.11	931.99	6.70	3312	7.18
70	48.47	22.43	1087.18	7.40	3483	6.80
75	48.15	27.16	1307.75	8.38	3698	6.40
80	47.81	30.45	1455.81	9.02	3828	6.19
90	47.45	40.22	1908.43	10.74	4167	5.62
100	46.23	48.66	2249.55	11.76	4353	5.22

The above bench test data are for reference only and tested at ambient room temperate at MSL. Actual data might vary based on environmental and field conditions.

Motor Specifications

KV Rating	KV100	Peak Thrust	12 kg
Rated Voltage(LiPo)	12S	Recommended Propeller	30x10.5 inch
Peak Current	50 A	Dimension	Φ99x33 mm
Recommended Thrust	5.5 kg	Weight	560 g



PERFORMANCE DATA

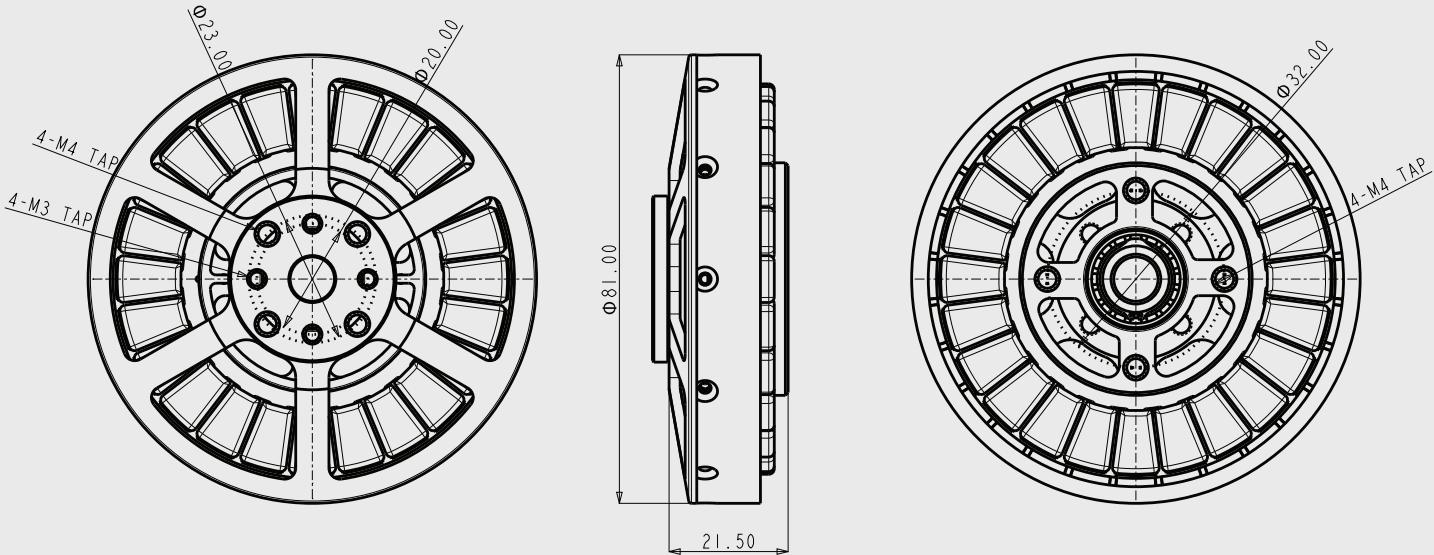
Propeller: 30x10.5" | ESC: E60, 12S | Power Source: LiPO 12S

Throttle (%)	Voltage(V)	Current(A)	Power(W)	Thrust(Kg)	Speed(RPM)	Efficiency(g/W)
30	49.53	3.32	164.44	1.84	1772	11.19
35	49.40	4.97	245.52	2.52	2041	10.26
40	49.30	6.37	314.04	3.10	2269	9.87
45	49.18	8.26	406.23	3.70	2478	9.11
50	49.01	10.56	517.55	4.48	2718	8.66
55	48.81	13.24	646.24	5.38	2931	8.33
60	48.57	15.54	754.78	5.92	3107	7.84
65	48.32	18.63	900.20	6.68	3300	7.42
70	48.09	22.39	1076.74	7.50	3490	6.97
75	47.76	26.16	1249.40	8.42	3656	6.74
80	47.39	29.84	1414.12	9.24	3812	6.53
90	46.89	38.79	1818.86	10.64	4117	5.85
100	46.28	48.00	2221.44	12.04	4366	5.42

The above bench test data are for reference only and tested at ambient room temperate at MSL. Actual data might vary based on environmental and field conditions.

Motor Specifications

KV Rating	KV230	Peak Thrust	3700g
Rated Voltage(LiPo)	6S	Recommended Propeller	24x7.2 inch
Peak Current	25 A	Dimension	Φ81x21.5 mm
Recommended Thrust	1500g	Weight	245 g



PERFORMANCE DATA

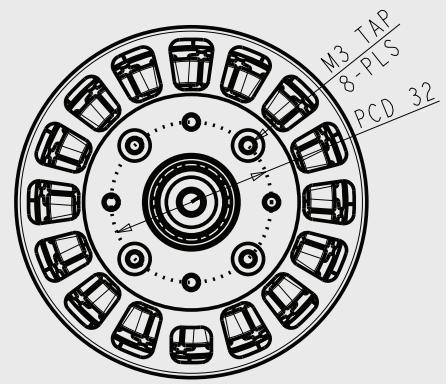
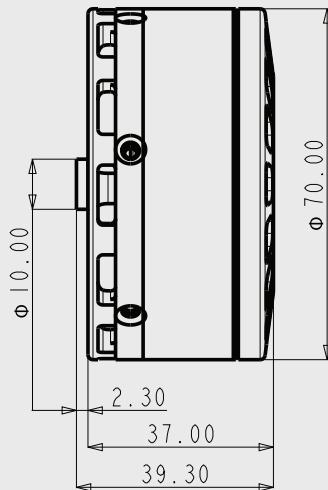
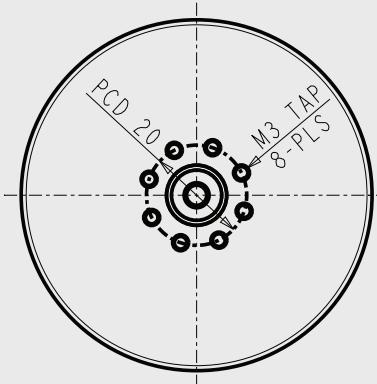
Propeller: 24x7.2" | ESC: F40, 6S | Power Source: LiPO 6S

Throttle (%)	Voltage(V)	Current(A)	Power(W)	Thrust(g)	Speed(RPM)	Efficiency(g/W)
30	24.67	1.87	46.13	762	1503	16.52
35	24.57	2.53	62.16	938	1643	15.09
40	24.52	3.21	78.71	1042	1778	13.24
45	24.44	3.91	95.56	1223	1915	12.80
50	24.31	4.51	109.64	1429	2062	13.03
55	24.21	5.70	138.00	1618	2186	11.72
60	24.10	6.89	166.05	1800	2313	10.84
65	23.98	7.89	189.20	1962	2452	10.37
70	23.83	9.71	231.39	2268	2603	9.80
75	23.73	11.40	270.52	2473	2723	9.14
80	23.60	13.50	318.60	2753	2859	8.64
90	23.28	18.50	430.68	3345	3146	7.77
100	22.99	23.60	542.56	3693	3321	6.81

The above bench test data are for reference only and tested at ambient room temperate at MSL. Actual data might vary based on environmental and field conditions.

Motor Specifications

KV Rating	KV150	Peak Thrust	14.5 kg
Rated Voltage(LiPo)	12S	Recommended Propeller	23x8.8 inch
Peak Current	110 A	Dimension	Φ70x39.3 mm
Recommended Thrust	5Kg	Weight	468 g



PERFORMANCE DATA

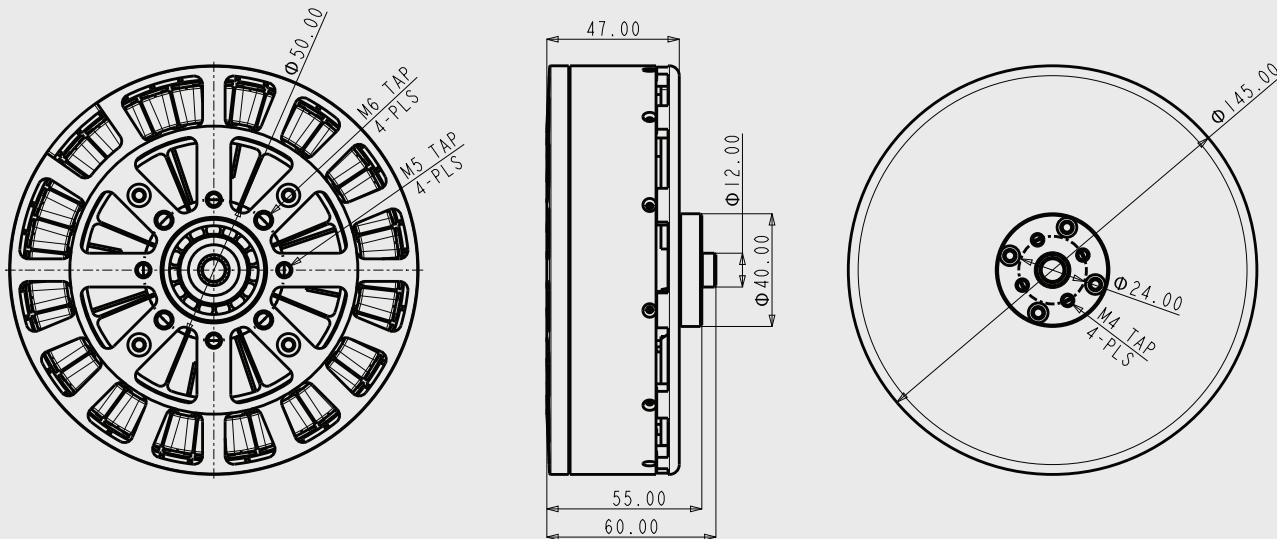
Propeller: 23x8.8" | ESC: E120,12S | Power Source: LiPO 12S

Throttle (%)	Voltage(V)	Current(A)	Power(W)	Thrust(kg)	Speed(RPM)	Efficiency(g/W)
30	49.25	9.46	465.91	3.22	3386	6.91
35	48.96	13.03	637.95	4.14	3828	6.49
40	48.61	16.44	799.15	4.90	4155	6.13
45	48.25	20.39	983.82	5.62	4448	5.71
50	47.90	24.73	1184.57	6.44	4745	5.44
55	47.46	29.69	1409.09	7.20	4997	5.11
60	47.60	37.31	1775.96	8.52	5311	4.80
65	46.71	42.54	1987.04	9.56	5596	4.81
70	46.45	49.23	2286.73	10.48	5855	4.58
75	45.99	55.91	2571.30	11.00	6057	4.28
80	45.47	66.00	3001.02	11.68	6264	3.89
90	44.78	82.77	3706.44	13.26	6613	3.58
100	44.08	101.80	4487.34	14.66	6918	3.27

The above bench test data are for reference only and tested at ambient room temperate at MSL. Actual data might vary based on environmental and field conditions.

Motor Specifications

KV Rating	KV80	Peak Thrust	36 kg
Rated Voltage(LiPo)	24S	Recommended Propeller	40x13.1 inch
Peak Current	85 A	Dimension	Φ145x47 mm
Recommended Thrust	15 kg	Weight	1854 g



PERFORMANCE DATA

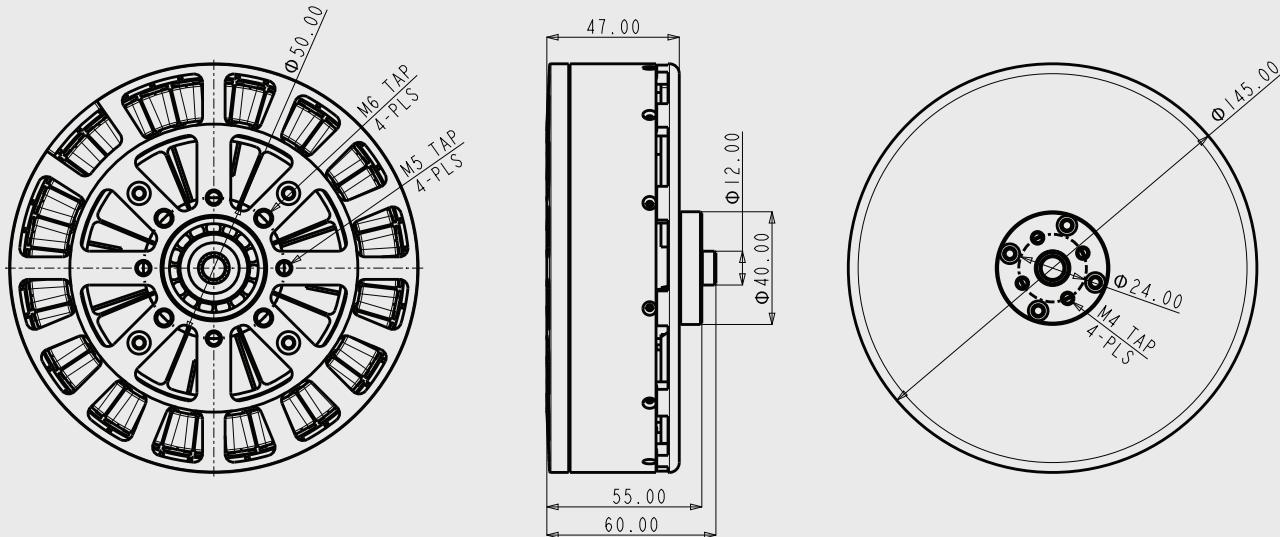
Propeller: 40x13.1" | ESC: EH200, 24S | Power Source: LiPO 24S

Throttle (%)	Voltage(V)	Current(A)	Power(W)	Thrust(Kg)	Speed(RPM)	Efficiency(g/W)
30	99.91	6.85	684.38	6.02	1520	8.80
35	99.60	9.05	901.38	7.72	1717	8.56
40	99.40	11.74	1166.96	9.38	1885	8.04
45	98.80	15.98	1578.82	11.92	2114	7.55
50	98.66	19.58	1931.76	13.82	2286	7.15
55	98.30	23.57	2316.93	15.91	2452	6.87
60	97.70	27.90	2725.83	18.61	2589	6.83
65	97.21	32.62	3170.99	19.96	2726	6.29
70	96.71	38.23	3697.22	21.88	2763	5.92
75	96.16	43.36	4169.50	23.90	2994	5.73
80	95.55	50.22	4798.52	26.40	3133	5.50
90	94.65	66.26	6271.51	31.08	3446	4.96
100	93.29	83.87	7824.23	36.46	3640	4.66

The above bench test data are for reference only and tested at ambient room temperate at MSL. Actual data might vary based on environmental and field conditions.

Motor Specifications

KV Rating	KV50	Peak Thrust	52 kg
Rated Voltage(LiPo)	24S	Recommended Propeller	40x13.1 inch
Peak Current	200 A	Dimension	Φ145x60 mm
Recommended Thrust	25 kg	Weight	2250 g



PERFORMANCE DATA

Propeller: 40x13.1" | ESC: EH200, 24S | Power Source: LiPO 24S

Throttle (%)	Voltage(V)	Current(A)	Power(W)	Thrust(Kg)	Speed(RPM)	Efficiency(g/W)
30	102.40	19.20	1966.08	12.44	2194	6.33
35	101.90	25.95	2644.31	16.66	2595	6.30
40	101.20	35.50	3592.60	20.48	2782	5.70
45	100.40	44.61	4478.84	24.24	3080	5.41
50	99.13	56.14	5565.16	27.86	3188	5.01
55	97.31	69.73	6785.43	31.24	3480	4.60
60	97.99	81.84	8019.50	35.55	3585	4.43
65	96.84	98.99	9586.19	40.24	3720	4.20
70	94.89	119.40	11329.87	43.28	3931	3.82
75	90.67	127.30	11542.29	45.74	4050	3.96
80	89.27	157.10	14024.32	48.46	4110	3.46
90	87.20	170.50	14867.60	49.34	4175	3.32
100	85.20	198.30	16895.16	51.80	4230	3.07

The above bench test data are for reference only and tested at ambient room temperate at MSL. Actual data might vary based on environmental and field conditions.



MÆLARD



High temperature resistant copper windings



Aerospace grade aluminum



Dust resistant & Waterproof



Efficient centrifugal cooling



Extended peak thrust

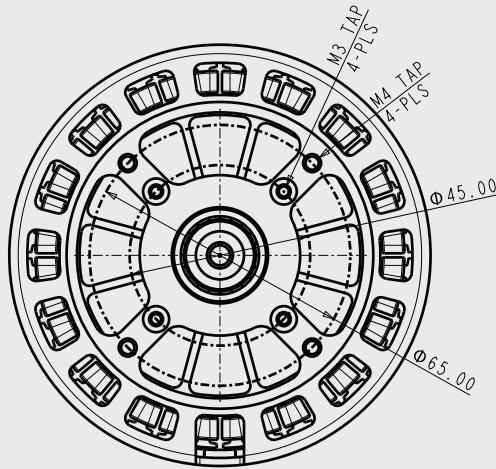
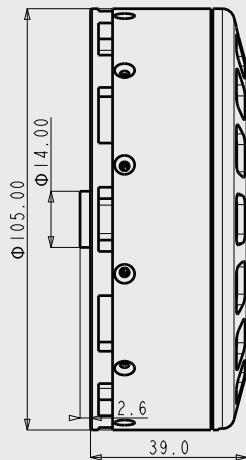
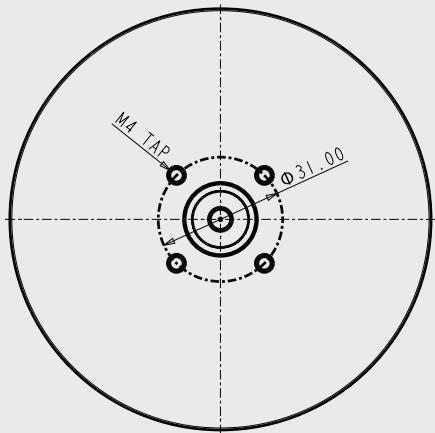


Improved operating point efficiency



Motor Specifications

KV Rating	100KV	Peak Thrust	18 kg
Rated Voltage(LiPo)	14S	Recommended Propeller	36x19 inch
Peak Current	70 A	Dimension	Φ105x39 mm
Recommended Thrust	6 kg	Weight	842 g



PERFORMANCE DATA

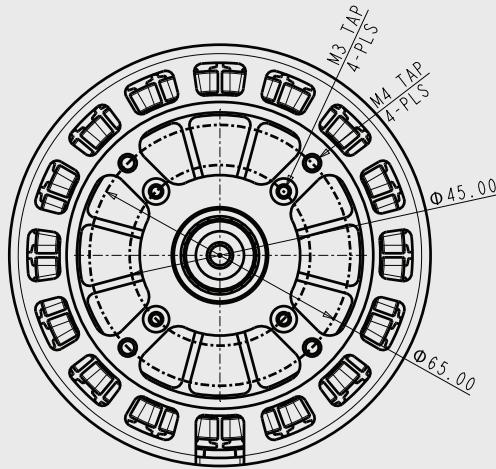
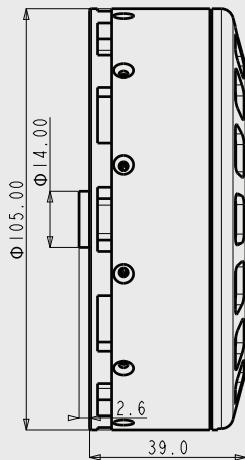
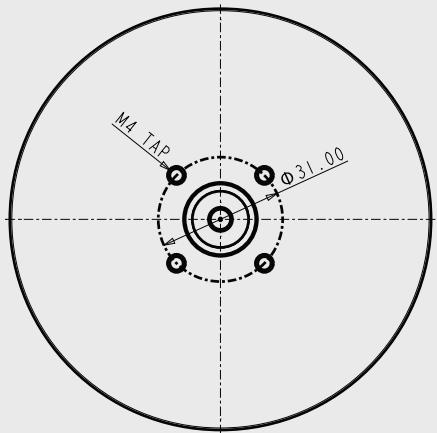
Propeller: 36x19" | ESC: F120A, 14S | Power Source: LiPO 14S

Throttle (%)	Voltage(V)	Current(A)	Power(W)	Thrust(Kg)	Speed(RPM)	Efficiency(g/W)
30	58.04	5.68	329.44	3.34	1532	10.14
35	57.87	7.55	437.15	4.02	1671	9.20
40	57.72	9.20	531.20	4.64	1810	8.73
45	57.54	11.07	636.97	5.38	1940	8.45
50	57.27	13.08	749.09	6.16	2084	8.22
55	57.06	15.64	892.42	6.90	2217	7.73
60	56.82	18.51	1051.74	7.90	2355	7.51
65	56.42	21.89	1235.03	9.10	2495	7.37
70	56.09	25.67	1439.83	10.16	2634	7.06
75	55.84	29.77	1662.36	11.32	2776	6.81
80	55.40	35.35	1958.39	12.38	2895	6.32
90	54.86	48.34	2651.93	14.96	3170	5.64
100	53.41	70.38	3759.00	18.08	3451	4.81

The above bench test data are for reference only and tested at ambient room temperate at MSL. Actual data might vary based on environmental and field conditions.

Motor Specifications

KV Rating	KV100	Peak Thrust	24 kg
Rated Voltage(LiPo)	14S	Recommended Propeller	36x19 inch
Peak Current	150 A	Dimension	Φ105x39 mm
Recommended Thrust	12 kg	Weight	850 g



PERFORMANCE DATA

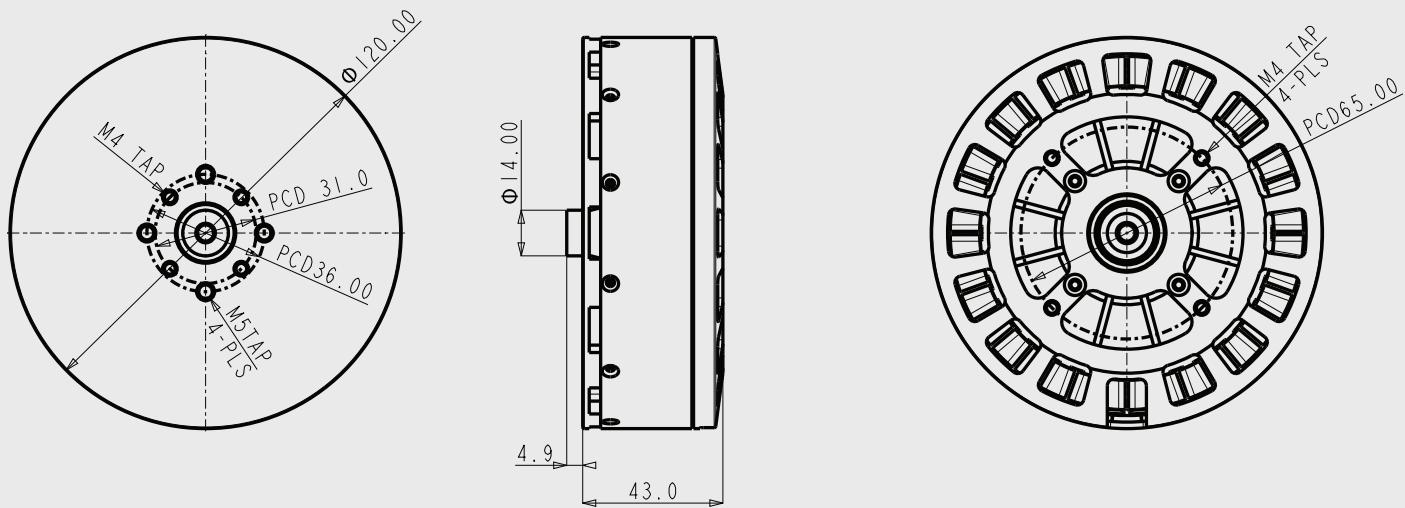
Propeller: 36x19" | ESC: E150, 14S | Power Source: LiPO 14S

Throttle (%)	Voltage(V)	Current(A)	Power(W)	Thrust(Kg)	Speed(RPM)	Efficiency(g/W)
30	57.24	18.23	1043.49	8.16	2357	7.82
35	56.76	25.24	1432.62	10.40	2606	7.26
40	56.27	32.81	1846.22	12.06	2820	6.53
45	55.67	41.02	2283.58	13.76	3038	6.03
50	55.23	48.77	2693.57	14.16	3149	5.26
55	54.54	58.98	3216.77	16.28	3307	5.06
60	55.09	73.36	4041.40	18.72	3549	4.63
65	54.26	85.09	4616.98	20.52	3671	4.44
70	54.11	100.10	5416.41	21.92	3807	4.05
75	53.71	112.90	6063.86	23.28	3912	3.84
90	52.06	134.40	6996.86	24.00	4104	3.43
100	51.40	138.10	7098.34	23.58	4098	3.32

The above bench test data are for reference only and tested at ambient room temperate at MSL. Actual data might vary based on environmental and field conditions.

Motor Specifications

KV Rating	KV60	Peak Thrust	34 kg
Rated Voltage(LiPo)	14S	Recommended Propeller	48x17.5 inch
Peak Current	150 A	Dimension	Φ120x43 mm
Recommended Thrust	15 kg	Weight	1280 g



PERFORMANCE DATA

Propeller: 48x17.5" | ESC: E260, 14S | Power Source: LiPO 14S

Throttle (%)	Voltage(V)	Current(A)	Power(W)	Thrust(kgF)	Speed(RPM)	Efficiency(g/W)
30	58.12	9.64	559.99	7.02	1222	12.54
35	57.85	13.40	775.19	9.02	1374	11.64
40	57.38	16.95	972.59	10.40	1483	10.69
45	57.10	21.74	1241.35	12.45	1610	10.03
50	56.72	27.27	1546.75	14.63	1735	9.46
55	56.28	34.41	1936.59	16.62	1857	8.58
60	55.89	41.60	2325.02	18.56	1971	7.98
65	55.16	49.57	2734.28	20.88	2009	7.64
70	54.64	57.05	3117.21	22.42	2151	7.19
75	54.30	65.48	3555.56	24.05	2223	6.76
80	55.02	80.16	4410.40	26.90	2357	6.10
90	53.77	102.00	5484.54	30.72	2508	5.60
100	53.12	124.60	6618.75	33.91	2641	5.12

The above bench test data are for reference only and tested at ambient room temperate at MSL. Actual data might vary based on environmental and field conditions.

ESC



Short Circuit Protection



Start Protection



Stalling Protection



Voltage Protection



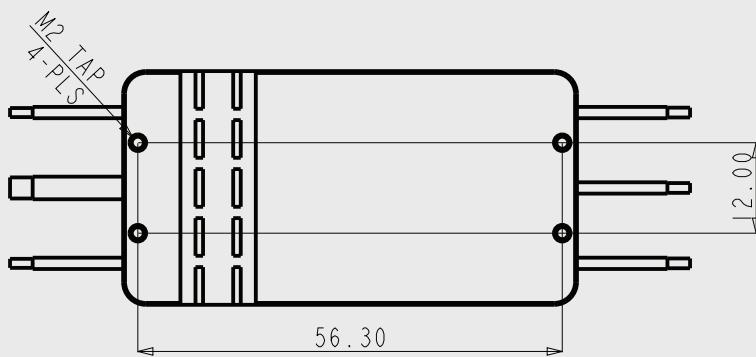
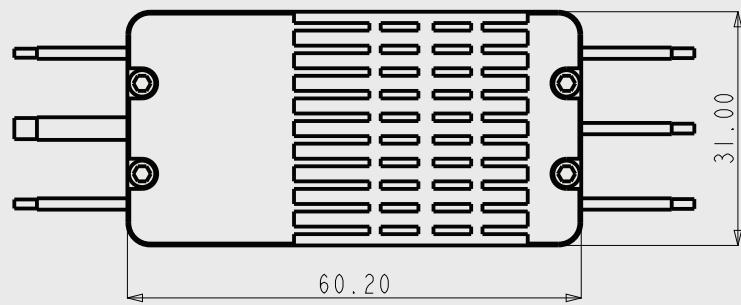
Temperature Protection



Throttle Loss Protection

Drive Specifications

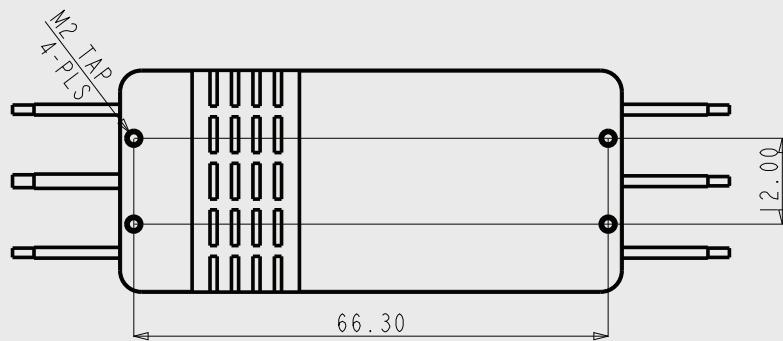
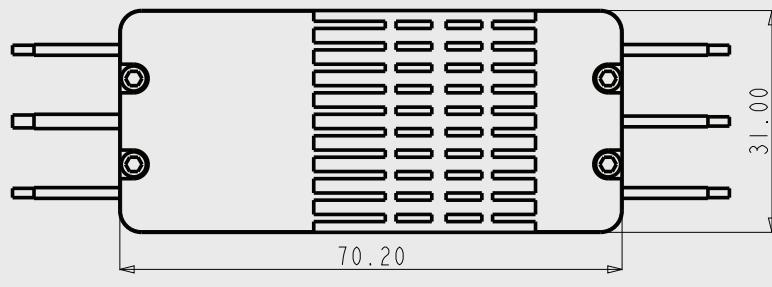
BEC	No	Temperature Protection	Yes
PWM Input Signal Voltage	3.3V/5V(compatible)	Speed Signal Output	No
Throttle Loss Protection	Yes	Weight(with wires)	57g
Phase Short Circuit Protection	Yes	Working Environmental Temperature	-20~65 °C
Size(LxWxH)	60.2x31.0x16.0mm	Recommended Battery	12S
Power Line	16AWG	Compatible Signal Frequency	50-500Hz
Continuous Current	40A (under good cooling conditions)	Stall Protection	Yes
Current limiting	48A	Error Signal Output	No
Throttle Pulse Width	1050us-1940us	Protection Grade	IPX4
Voltage Protection	Yes	Motor Line	16AWG



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Drive Specifications

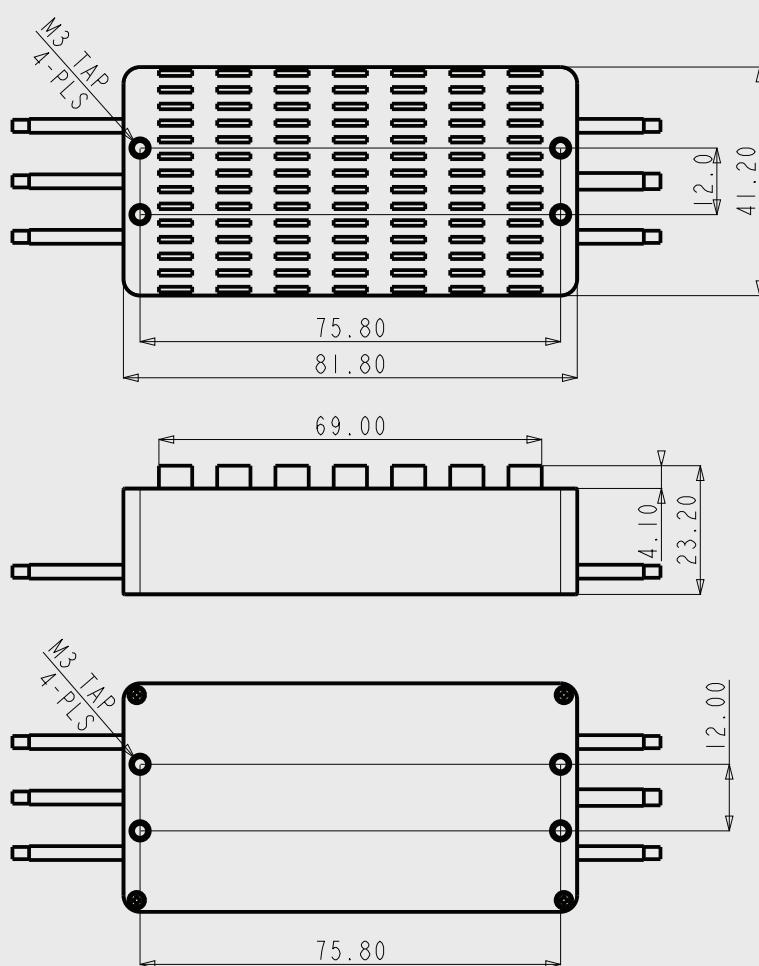
BEC	No	Temperature Protection	Yes
PWM Input Signal Voltage	3.3V/5V(compatible)	Speed Signal Output	No
Throttle Loss Protection	Yes	Weight(with wires)	108 g
Phase Short Circuit Protection	Yes	Working Environmental Temperature	-20~65 °C
Size(LxWxH)	70.2x31.0x16.0mm	Recommended Battery	12S
Power Line	14AWG	Compatible Signal Frequency	50-500Hz
Continuous Current	60A (under good cooling conditions)	Stall Protection	Yes
Current limiting	72A	Error Signal Output	No
Throttle Pulse Width	1050us-1940us	Protection Grade	IPX4
Voltage Protection	Yes	Motor Line	14AWG



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Drive Specifications

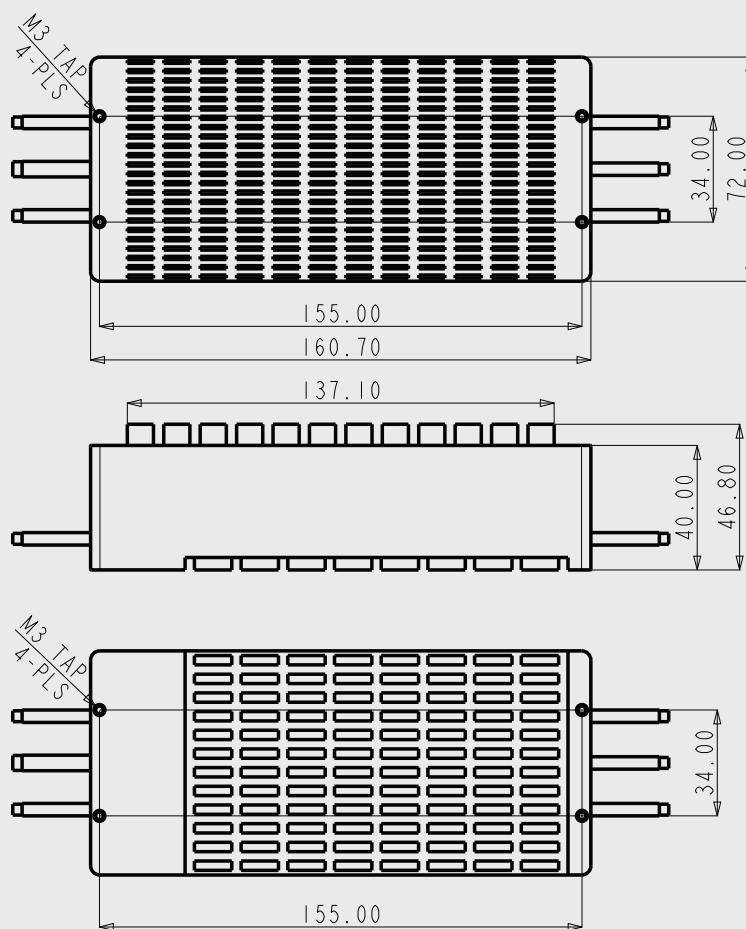
BEC	No	Temperature Protection	Yes
PWM Input Signal Voltage	3.3V/5V(compatible)	Speed Signal Output	Yes
Throttle Loss Protection	Yes	Weight(with wires)	215g
Phase Short Circuit Protection	Yes	Working Environmental Temperature	-20~65 °C
Size(LxWxH)	81.8x41.2x23.2mm	Recommended Battery	12S
Power Line	12AWG	Compatible Signal Frequency	50-500Hz
Continuous Current	120A (under good cooling conditions)	Stall Protection	Yes
Current limiting	120A	Error Signal Output	Yes
Throttle Pulse Width	1050us-1940us	Protection Grade	IP67
Voltage Protection	Yes	Motor Line	12AWG



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Drive Specifications

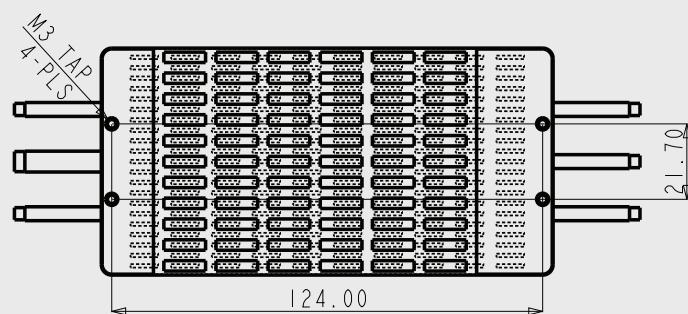
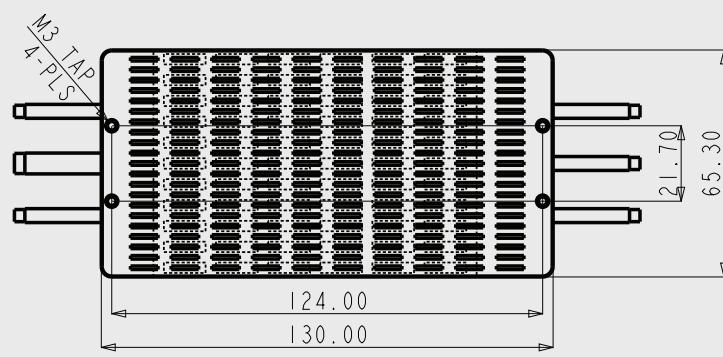
BEC	5V/200mA output	Temperature Protection	Yes
PWM Input Signal Voltage	3.3V/5V(compatible)	Speed Signal Output	Yes
Throttle Loss Protection	Yes	Weight(with wires)	725 g
Phase Short Circuit Protection	Yes	Working Environmental Temperature	-20~65 °C
Size(LxWxH)	160.7x72x46mm	Recommended Battery	24S
Power Line	8AWG	Compatible Signal Frequency	50-500Hz
Continuous Current	200A (under good cooling conditions)	Stall Protection	Yes
Current limiting	200A	Error Signal Output	Yes
Throttle Pulse Width	1050us-1940us	Protection Grade	IPX4
Voltage Protection	Yes	Motor Line	8AWG



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Drive Specifications

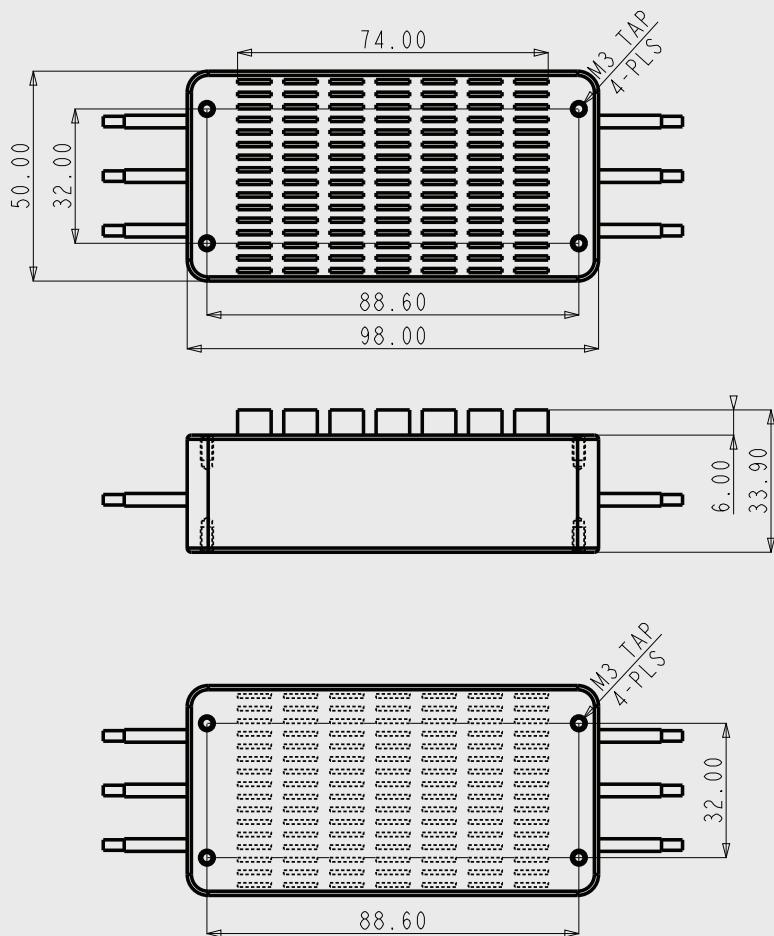
BEC	5V/200mA output	Temperature Protection	Yes
PWM Input Signal Voltage	3.3V/5V(compatible)	Speed Signal Output	Yes
Throttle Loss Protection	Yes	Weight(with wires)	537 g
Phase Short Circuit Protection	Yes	Working Environmental Temperature	-20~65 °C
Size(LxWxH)	130.0x65.3x43.0mm	Recommended Battery	14S
Power Line	8AWG	Compatible Signal Frequency	50-500Hz
Continuous Current	260A (under good cooling conditions)	Stall Protection	Yes
Current limiting	260A	Error Signal Output	Yes
Throttle Pulse Width	1050us-1940us	Protection Grade	IPX4
Voltage Protection	Yes	Motor Line	8AWG



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Drive Specifications

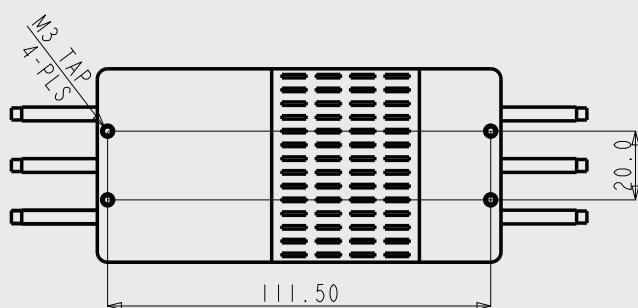
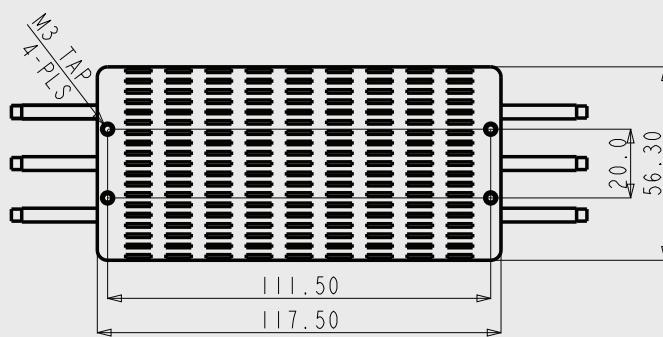
BEC	No	Temperature Protection	Yes
PWM Input Signal Voltage	3.3V/5V(compatible)	Speed Signal Output	Yes
Throttle Loss Protection	Yes	Weight(with wires)	357 g
Phase Short Circuit Protection	Yes	Working Environmental Temperature	-20~65 °C
Size(LxWxH)	98.0x50.0x33.9mm	Recommended Battery	14S
Power Line	10AWG	Compatible Signal Frequency	50-500Hz
Continuous Current	150A (under good cooling conditions)	Stall Protection	Yes
Current limiting	150A	Error Signal Output	Yes
Throttle Pulse Width	1050us-1940us	Protection Grade	IP67
Voltage Protection	Yes	Motor Line	12AWG



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Drive Specifications

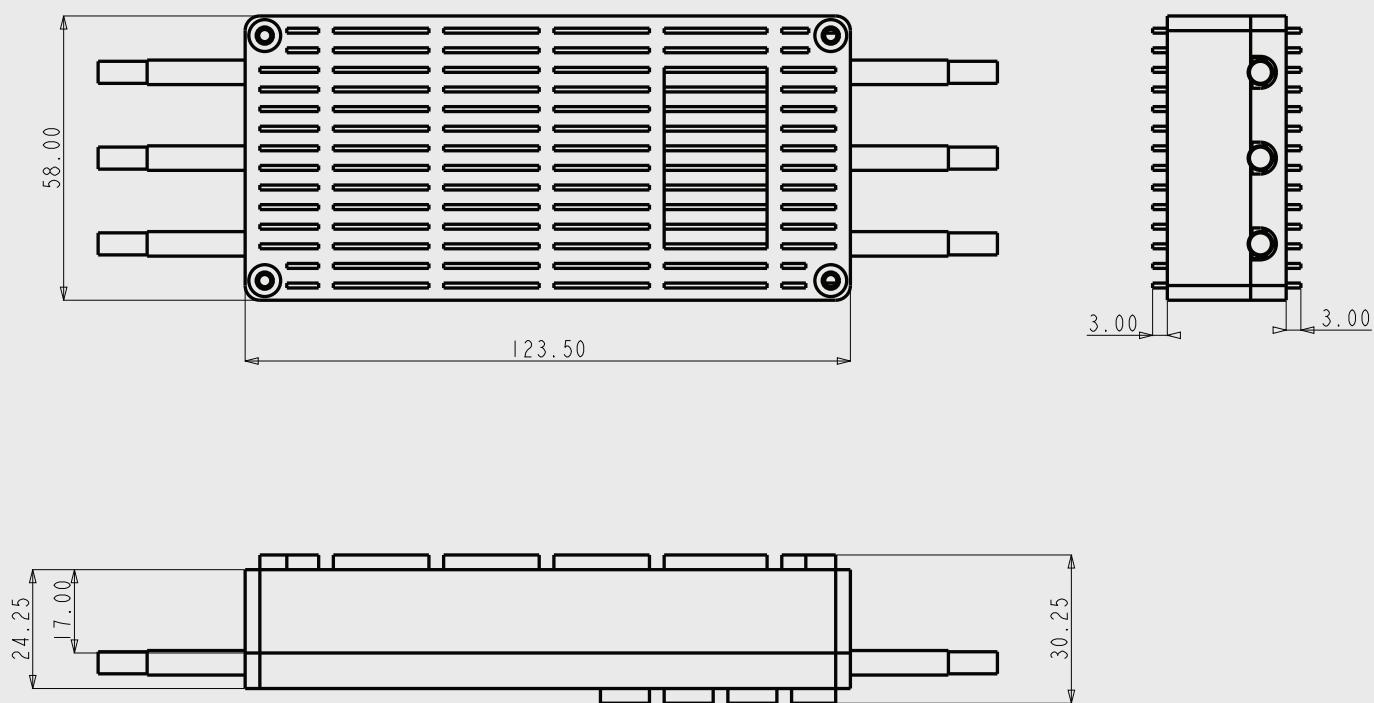
BEC	No	Temperature Protection	Yes
PWM Input Signal Voltage	3.3V/5V(compatible)	Speed Signal Output	Yes
Throttle Loss Protection	Yes	Weight(without lines)	320g
Phase Short Circuit Protection	Yes	Working Environmental Temperature	-20~65 °C
Size(LxWxH)	117.5x56.3x42.8mm	Recommended Battery	14S
Power Line	8AWG	Compatible Signal Frequency	50-500Hz
Continuous Current	200A (under good cooling conditions)	Stall Protection	Yes
Current limiting	200A	Error Signal Output	Yes
Throttle Pulse Width	1050us-1940us	Protection Grade	IP67
Voltage Protection	Yes	Motor Line	8AWG



The above bench test data are for reference only and tested at ambient room temperature at MSL. Actual data might vary based on environmental and field conditions.

Drive Specifications

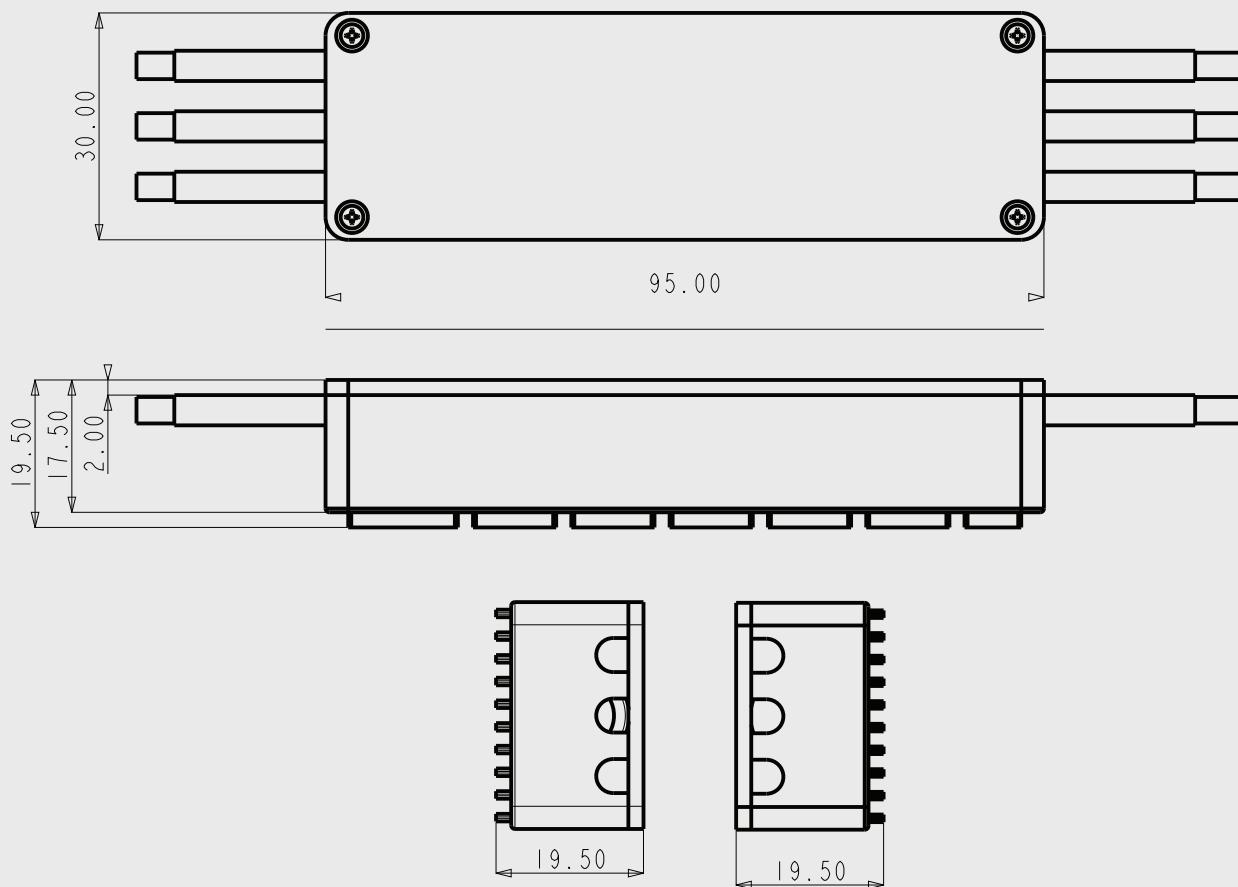
BEC	No	Temperature Protection	Yes
PWM Input Signal Voltage	3.3V/5V(compatible)	Speed Signal Output	No
Throttle Loss Protection	Yes	Weight(without lines)	248g
Phase Short Circuit Protection	Yes	Working Environmental Temperature	-20~65 °C
Size(LxWxH)	123.5x58.6x30.25mm	Recommended Battery	12S~14S
Power Line	10AWG	Compatible Signal Frequency	50-500Hz
Continuous Current	150A (under good cooling conditions)	Stall Protection	Yes
Current limiting	150A	Error Signal Output	Yes
Throttle Pulse Width	1050us-1940us	Protection Grade	IP67
Voltage Protection	Yes	Motor Line	12AWG



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Drive Specifications

BEC	No	Temperature Protection	Yes
PWM Input Signal Voltage	3.3V/5V(compatible)	Speed Signal Output	No
Throttle Loss Protection	Yes	Weight(without wires)	65g
Phase Short Circuit Protection	Yes	Working Environmental Temperature	-20~65 °C
Size(LxWxH)	95x30x19.5mm	Recommended Battery	6S
Power Line	16AWG	Compatible Signal Frequency	50-500Hz
Continuous Current	30A (under good cooling conditions)	Stall Protection	Yes
Current limiting	35A	Error Signal Output	No
Throttle Pulse Width	1050us-1940us	Protection Grade	IPX4
Voltage Protection	Yes	Motor Line	16AWG

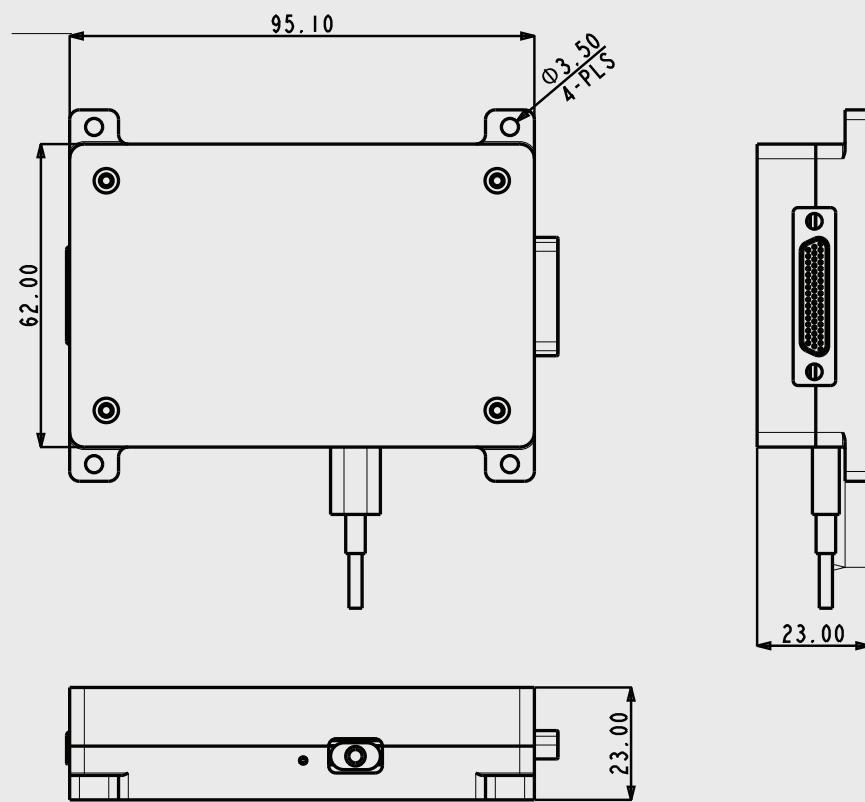


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Specifications

Operating Voltage	4.5 - 5.5V
Operating Temperature	-20 to 70°C
Size	95.1x62x23mm
Weight	155g
PWM Output	8 PWM + 6 AUX (PWM/GPIO)
RC IN	PPM/SBUS
USB	Type C
Power Monitor	2(Analog/CAN)
Power Input	8 pin ClickMate molex
Output Connector	J30J - 51 Pin MIL Std connector
Software Support	Mission Planner/ Q Ground Control

Onboard Sensor	<ul style="list-style-type: none"> • Triple IMU • Dual Barometer • Compass
Features	<ul style="list-style-type: none"> • Vibration Isolation • Internally can adopt redundant compass, GPS, Airspeed
Communication Interfere	<ul style="list-style-type: none"> • UART Port x 5 • I2C x 3 • CAN x 2 • ADC x 2 + 1(RSSI) • SPI x 1



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INTEGRATED POWER SYSTEMS



High temperature resistant
copper windings



Aerospace
grade aluminum



Dust persistent &
Waterproof



Efficient centrifugal
cooling



Extended peak thrust



Improved operating
point efficiency



Temperature
Protection



Throttle Loss
Protection



Short Circuit Protection



Start Protection



Stalling Protection



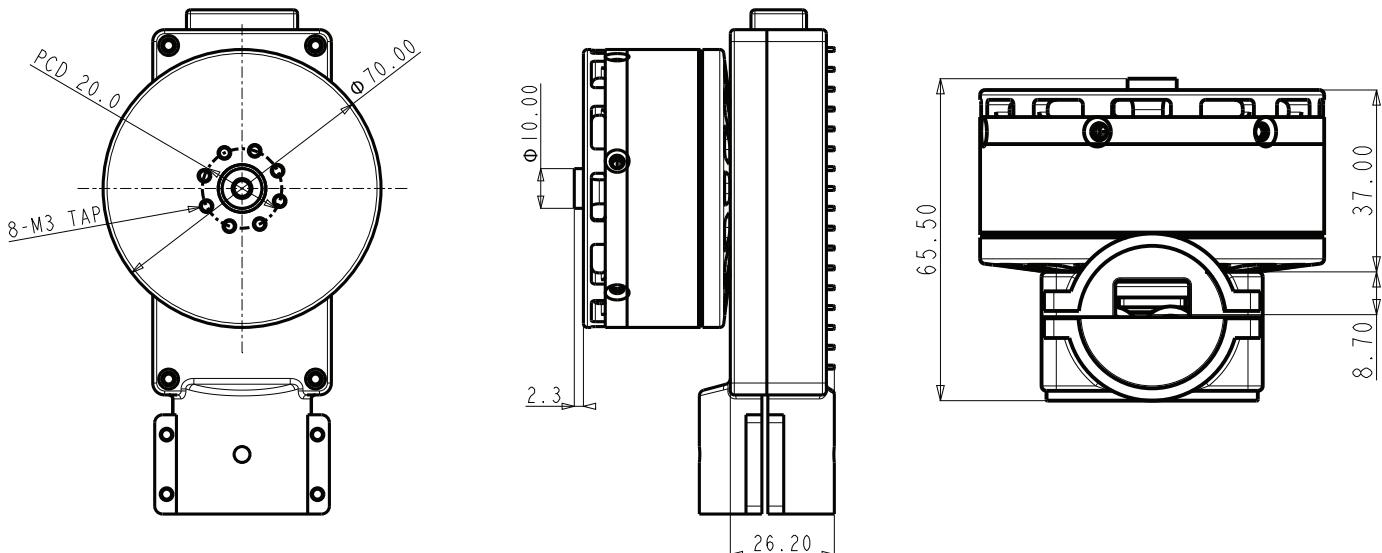
Voltage Protection

HÆMNG 7010 & F60 12S ESC

IPS

Motor Specifications

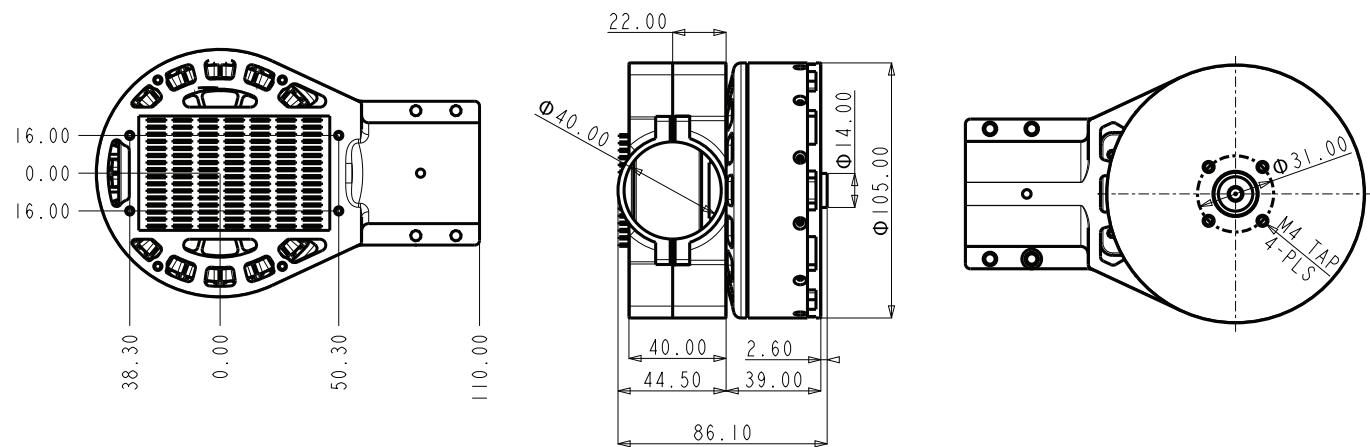
KV Rating	150KV	Peak Thrust	14.5 kg
Rated Voltage(LiPo)	12S	Recommended Propeller	23x8.8 inch
Peak Current	110 A	Dimension	Φ122x70x65.5 mm
Recommended Thrust	5 Kg	Weight(with wires)	660 g



MÆLARD 1026 & E150 12S ESC

Motor Specifications

KV Rating	KV100	Peak Thrust	24 kg
Rated Voltage(LiPo)	14S	Recommended Propeller	36x19 inch
Peak Current	150 A	Dimension	Φ110x105x86.1 mm
Recommended Thrust	12 kg	Weight(with wires)	1482 g



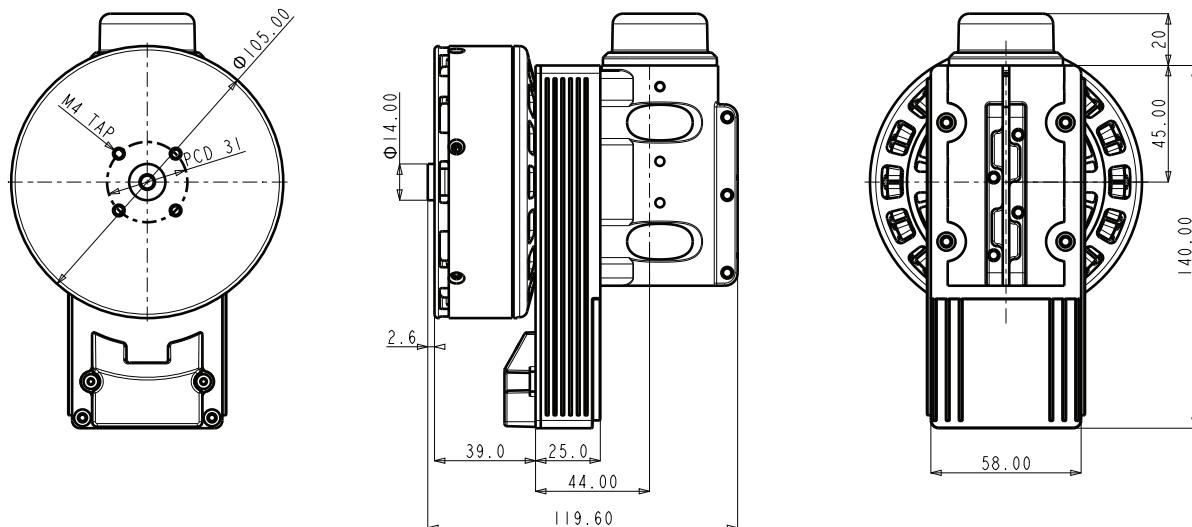
The above bench test data are for reference only and tested at ambient room temperate at MSL. Actual data might vary based on environmental and field conditions.

MÆLARD 1026 & F120 14S ESC

IPS

Motor Specifications

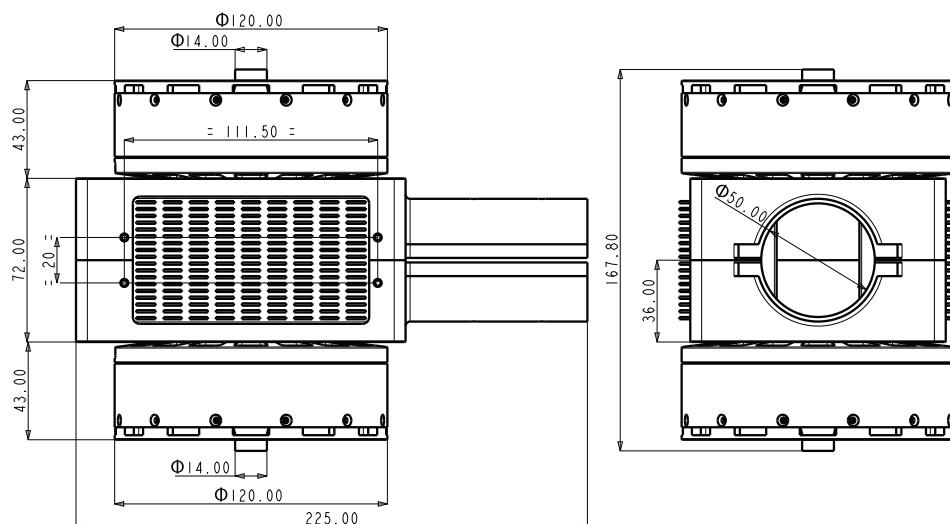
KV Rating	KV100	Peak Thrust	18 kg
Rated Voltage(LiPo)	14S	Recommended Propeller	36x19 inch
Peak Current	70 A	Dimension	Φ140x105x119.6 mm
Recommended Thrust	6 kg	Weight	1318 g



MÆLARD 1240 & E260 14S ESC

Motor Specifications

KV Rating	KV60	Peak Thrust	50 kg
Rated Voltage(LiPo)	14S	Recommended Propeller	48x17.5 inch
Peak Current	150 A	Dimension	Φ225x120x158 mm
Recommended Thrust	26 kg	Weight	4165 g



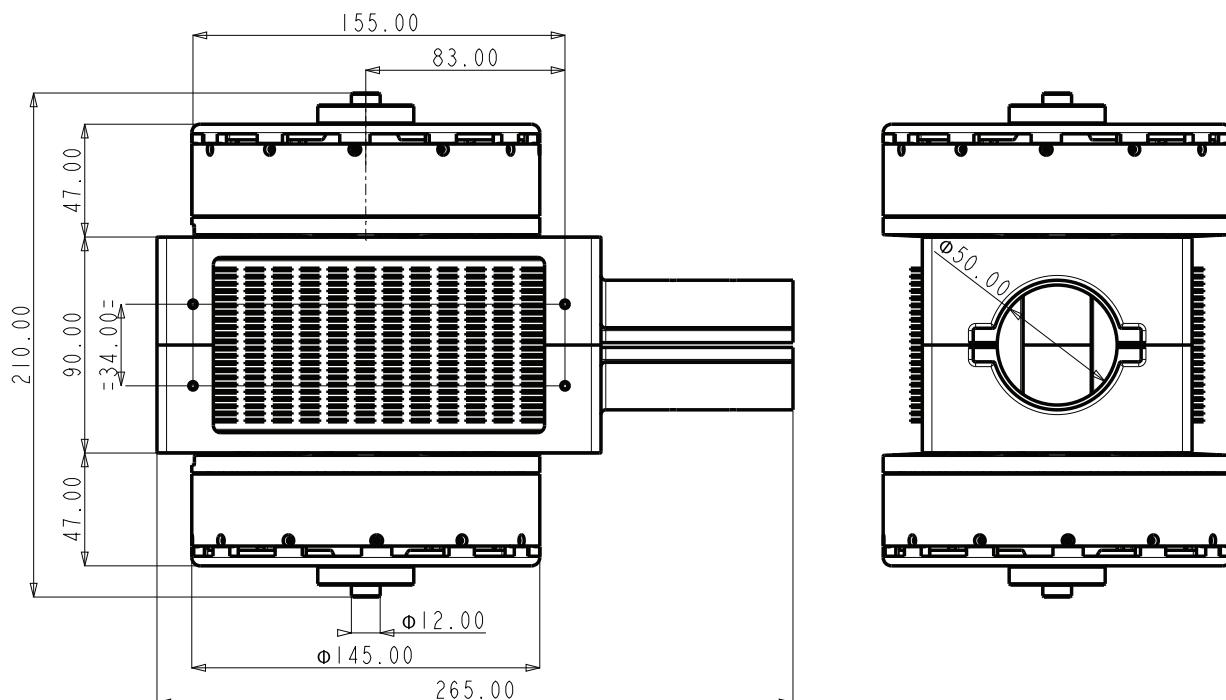
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MÆLARD 1536 & EH200 24S ESC

IPS

Motor Specifications

KV Rating	KV80	Peak Thrust	55 kg
Rated Voltage(LiPo)	24S	Recommended Propeller	40x13.1 inch
Peak Current	190 A	Dimension	Φ225x155x210 mm
Recommended Thrust	24 kg	Weight	5670 g



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