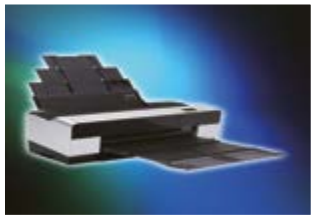

KOCO DC-MOTION

A VARIETY OF APPLICATIONS

PRECISION DC CORELESS MOTOR 1

BRUSHLESS DC MOTOR 2

ELECTRONIC SPEED CONTROLLER 3

PRECISION GEARMOTOR 4

PRECISION SERVO MOTOR 5

DC CORELESS MOTOR 6

FLAT DC MOTOR 7

DC CORE MOTOR 8

MINI STEP MOTOR 9

SONIC MOTOR 10

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Overview of the ELECTRONIC SPEED CONTROLLERS

	Controller	Current constant/peek	Sensored/ sensorless	Voltage (max)	Page
1	**ESC for Multi-Rotor**	30 A / 40 A	Y / N	25 V	4
2	**External ESC for BLDC Motor**	10 A / 15 A	Y / Y	50 V	5
3	**Integrated ESC for BLDC Motor**	3.0 A / 4.5 A	Y / Y	25 V	6

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ELECTRONIC SPEED CONTROLLER

The electronic speed controller has specifically designed software and hardware utilizing high quality materials and components. It is a high efficiency SMART controller that is

- **easy to operate**
- **has a low temperature rise**
- **low electromagnetic interference**
- **is designed for optimum use with our motors**

The controller can also be provided with customized ESC including closed-loop control.

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Electronic Speed Controller · **ESC for Multi-Rotor**

	Characteristics		BL_S 20A	BL_S 30A	X310	X420
1	Contant current	A	20	30	10	20
2	Peak current (10 s)	A	30	40	20	30
3	LiPo		2 – 4 S	2 – 4 S	2 – 3 S	2 – 4 S
4	BEC		No	No	No	No
5	Weight	g	< 5.1	< 5.8	< 8.2	< 18.2
6	PCB size	mm	14.5*26	14.5*26	16.5*28	22*32

Applications Multi-rotor drones

Product Photos

BL_S 20A

BL_S 30A

X310

X420

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Electronic Speed Controller · **External ESC for BLDC Motor**

	Characteristics		S17-112503	S17-112503H	S17-115003	S17-115003H	S12-072002	S13-071502H	S15-072510
1	Contant current	A	3	3	3	3	2	2	10
2	Peak current (10 s)	A	4.5	4.5	4.5	4.5	3	3	15
3	Voltage	V	11 – 25	11 – 25	11 – 50	11 – 50	7 – 20	7 – 15	7 – 25
4	Size	mm	96*69*23	96*69*23	96*69*35	96*69*35	37.6*26.2	33.2*27.5	35.2*23.2
5	Speed control signal		Analog voltage/ PWM	Analog voltage/ PWM	Analog voltage/ PWM	Analog voltage/ PWM	Analog voltage/ PWM	Analog voltage/PWM	Analog voltage/PWM
6	Overload protection		Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	Stall protection		Yes	No	Yes	No	Yes	No	Yes
8	Thermal protection		Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	F/R		Optional	Optional	Optional	Optional	Optional	Optional	Optional
10	Speed signal output		Optional	Optional	Optional	Optional	Optional	Optional	Optional
11	Operating temperature	°C	-20 ~ +60	-20 ~ +60	-20 ~ +60	-20 ~ +60	-20 ~ +60	-20 ~ +60	-20 ~ +60
12	Sensorless or sensored		Sensorless	Sensored	Sensorelss	Sensored	Sensorless	Sensored	Sensorless

Product Photos

S17-112503H

S12-072002

S13-071502H

S15-072510

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Electronic Speed Controller · **Integrated ESC for BLDC Motor**

	Characteristics		IN20-4L0715003	IN24-072003	IN43-072503H	IN75-122503H
1	Contant current	A	0.3	3	3	3
2	Peak current (10 s)	A	1	4.5	4.5	4.5
3	Voltage	V	7 ~ 15	7 ~ 20	7 ~ 25	12 ~ 25
4	Motor size	mm	Ø 20	Ø 24	Ø 43	Ø 75
5	Speed control signal		No	Analog voltage/ PWM	Analog voltage/ PWM	Analog voltage/ PWM
6	Overload protection		Yes	No	Yes	Yes
7	Stall protection		Yes	Yes	No	No
8	Thermal protection		Yes	Yes	Yes	Yes
9	F/R		No	Optional	Optional	Optional
10	Speed signal output		Optional	Optional	Optional	Optional
11	Operating temperature	°C	-20 ~ +50	-20 ~ +50	-20 ~ +50	-20 ~ +50
12	Sensorless or sensored		Sensorless	Sensorless	Sensored	Sensored

Product Photos

IN20-4L0715003

IN24-072003

IN43-072503H

IN75-122503H

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