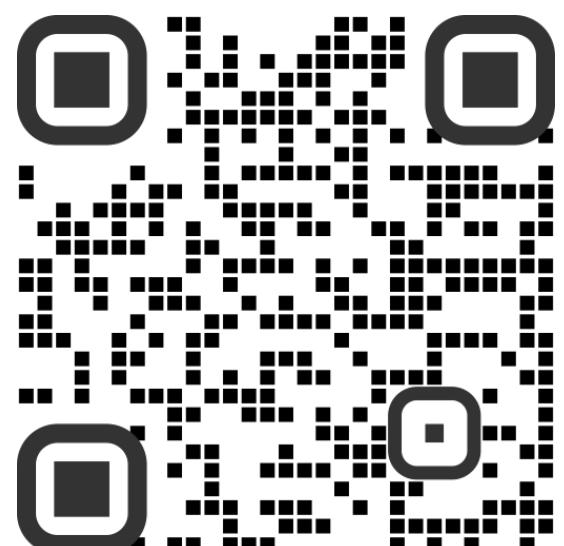




Your Partner In UAV Electronics

BLDC MOTORS  
ELECTRONIC SPEED CONTROLLERS  
PROPELLERS  
INTEGRATED PROPULSION UNITS  
CAPACITOR BANKS  
POWER DISTRIBUTION BOARDS

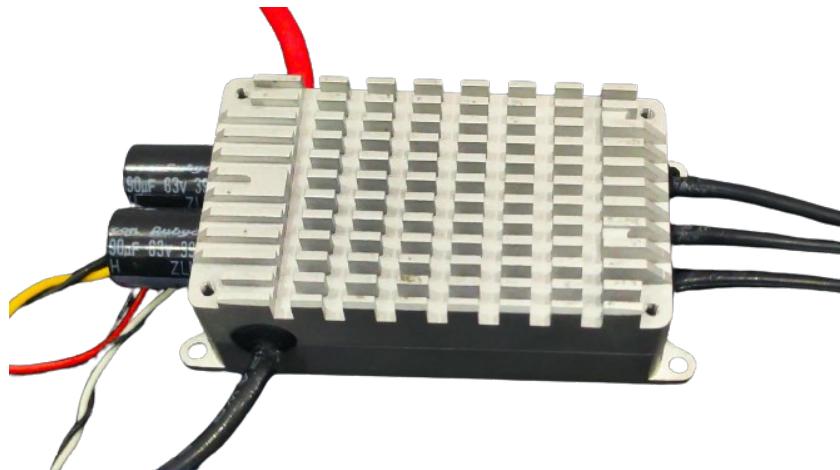


IIT KANPUR



STARTUP  
INCUBATION AND  
INNOVATION  
CENTRE  
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# Q series



## Product Description:

Reflex Drive's **Q Series** trapezoidal electronic speed controllers (ESC) offer a state-of-the-art solution to drive BLDC motors - and are proudly made in India.

The trapezoidal ESCs are designed to deliver superior performance and reliability, with customizable firmware and advanced safety features that make it the ideal choice for drone enthusiasts and commercial drone operators alike.

With its sleek and durable aluminium enclosure (optional), the trapezoidal ESC provides excellent heat dissipation and protection against harsh environmental conditions.

Q series Specifications	
Continuous Current Range	80A
Burst Current (15 Sec)	100A
Voltage	6S-12S
BEC	No
Max Operating Temperature	90 °C
Enclosure	Yes
Dimensions	87mm x 42.96mm x 23.71mm
Weight	90 Grams
Telemetry	Yes
Current Sense	Yes
Communication Protocol	PWM, DShot300
Waterproof Rating	IP57
Status	Production

## PERFORMANCE DATA

Motor	ESC	Propeller	Voltage	Current (A)	RPM	Power	Thrust	Max. Temp
RD-M-X8.1 8120 115KV  	RD Q-Series ESC 12S-80A  	RD 3090 30 Inch Folding Propeller  	50V	5	1840	270	2900	Motor Temp=70'C
				10	2251	460	4340	
				15	2624	720	5983	
				20	2880	950	7259	
				25	3090	1240	8486	ESC Temp=27'C
				30	3263	1440	9571	
				35	3436	1670	10490	
				40	3554	1870	11470	
				45	3664	2128	12223	
				50	3753	2390	12900	
				55	3828	2500	13323	

4

3

2

1

F

F

E

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D

D

C

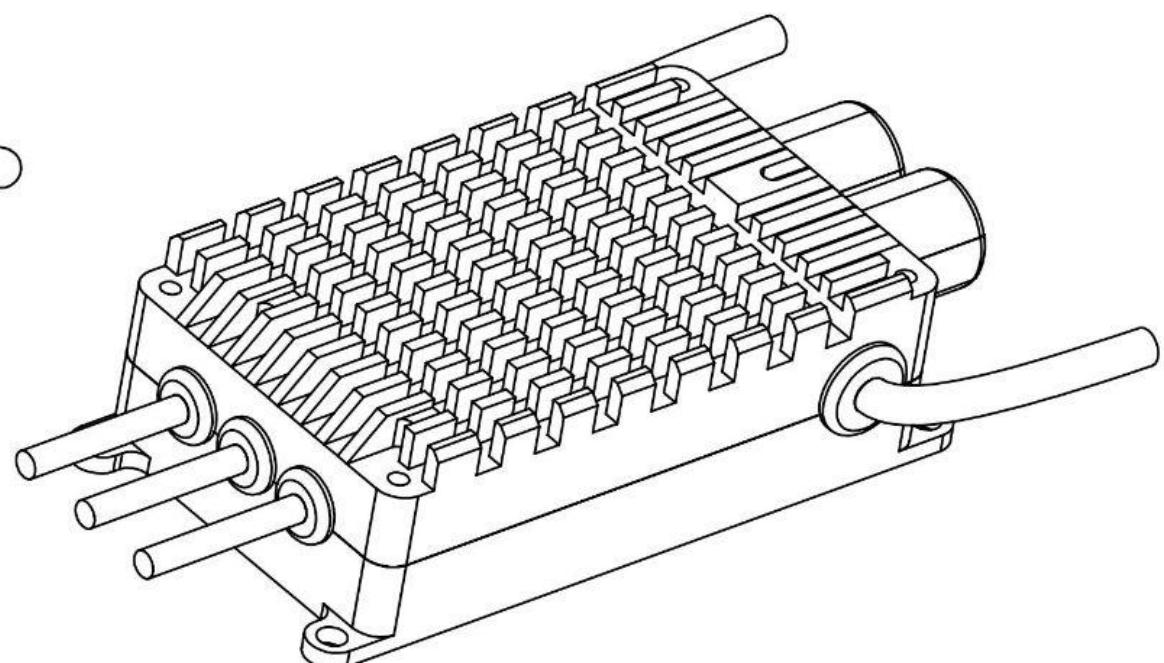
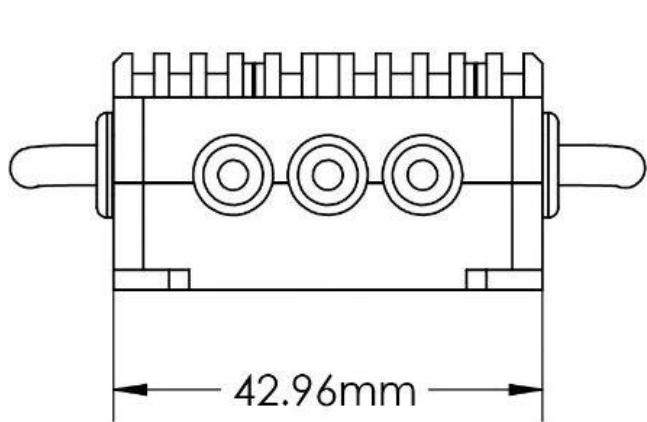
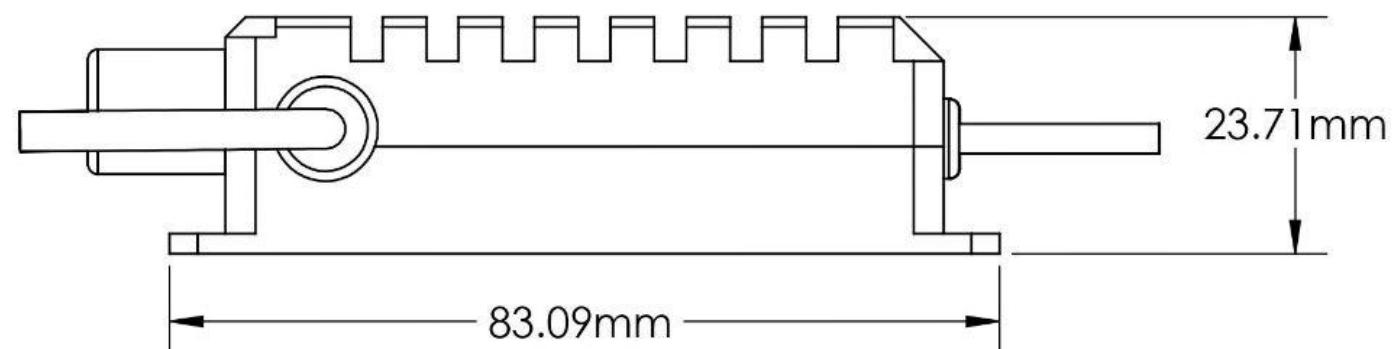
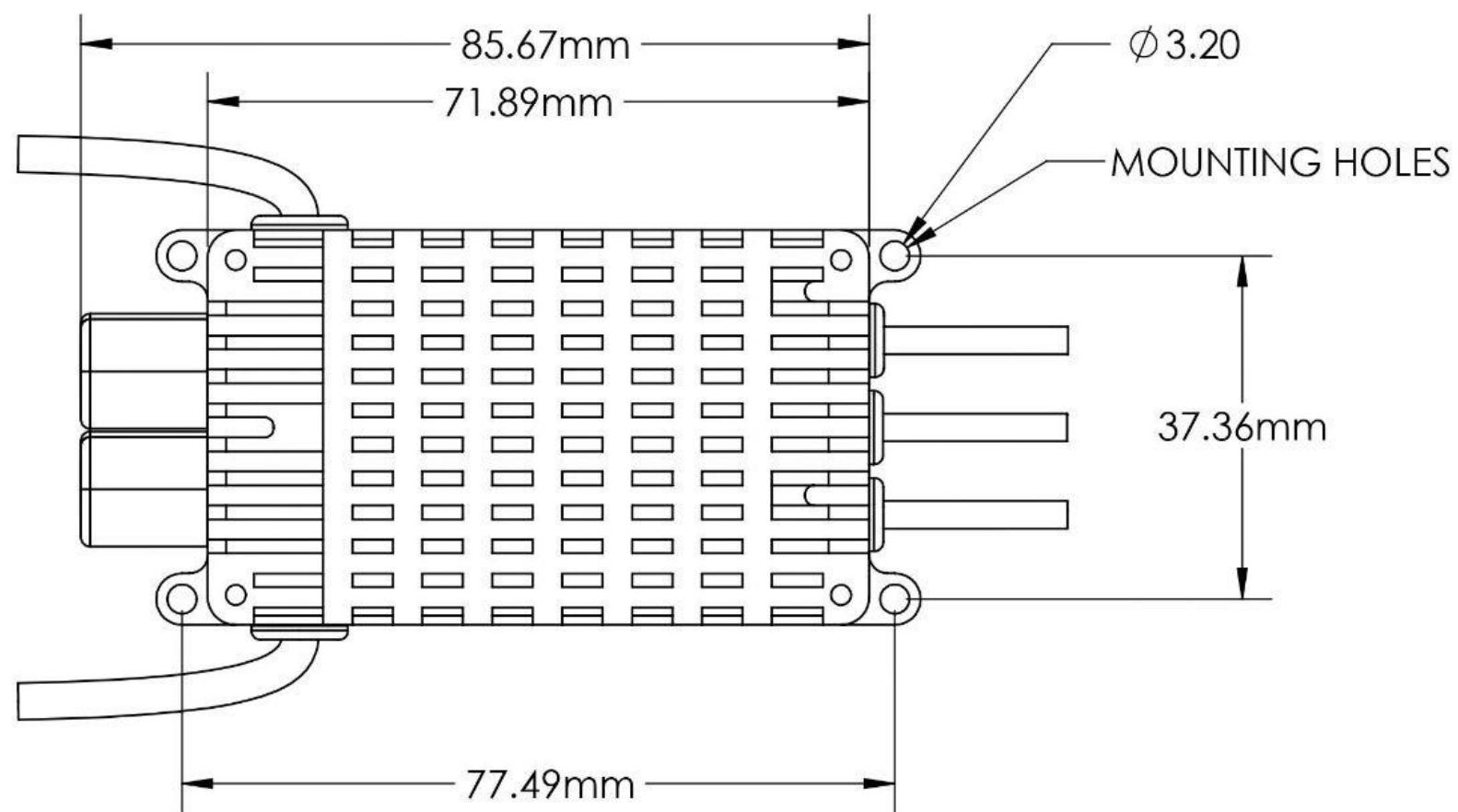
C

B

B

A

A



UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN MILLIMETERS  
SURFACE FINISH:  
TOLERANCES:  
LINEAR:  
ANGULAR:

FINISH:

DEBURR AND  
BREAK SHARP  
EDGES

DO NOT SCALE DRAWING

REVISION

DRAWN

NAME

SIGNATURE

DATE

CHK'D

APPV'D

MFG

Q.A.

TITLE:

RD Q-SERIES V2  
(WITH OPTO)

MATERIAL:

DWG NO.

A4

WEIGHT: 90 gms

SCALE:1:1

SHEET 2 OF 2