REFLEX DRIVE®

MADE IN INDIA

INTEGRATED PROPULSION UNIT

RD R11 IPU

PRELIMINARY DATASHEET - SUBJECT TO CHANGE



FOC

Field oriented control

REFLEX DRIVE®

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PRELIMINARY DATASHEET - SUBJECT TO CHANGE

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12S,150A	160KV	1750 gm	27kg
ESC RATING	KV RATING	WEIGHT INCL. PROPELLER	MAX THRUST

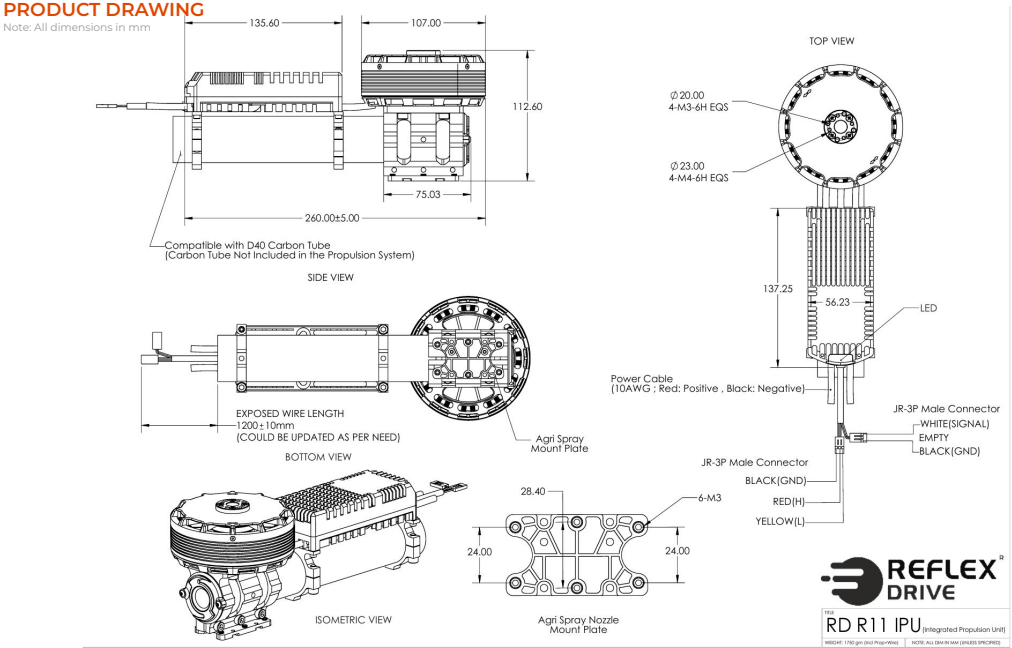
RD R11 IPU

INTEGRATED PROPULSION UNIT

- R11 IPU is a high-performance Integrated Propulsion Unit (IPU) specifically designed for drone applications.
- This all-in-one solution features a fully enclosed Electronic Speed Controller (ESC), ensuring optimal protection and reliability in demanding environments.
- The R11 IPU combines advanced propulsion technology with robust design, making it ideal for precision surveillance, payload, agriculture, crop monitoring, and spraying tasks.

PRODUCT DRAWING

Note: All dimensions in mm



BASIC PARAMETER

Product name	RD R11 IPU
Country of Origin	India
Throttle signal frequency	50-450Hz
Weight (incl. propeller & wire)	1750 gm
Dimension (mm)	260 x 107 x 112.60
Arm tube compatibility	D40 carbon tube (not included)
Maximum Thrust	27 kg
Recommended take-off weight	TBD
Max. Power	TBD
Operating Temperature	-20~65°C
Compliant	TBD
Certification	TBD

ESC	A-Series FOC 150A
Voltage Range	6S-12S LiPo
Max. Input Current	150A peak (<30 s), 75A continuous
PWM Range	1050-1950us
BEC	No
PWM Input Signal	TBD
Communication Protocol	PWM, CAN
Telemetry (over CAN)	Voltage, Current, Temperature, Motor RPM, Fault status

ESC	A-Series FOC 150A
Power Leads (AWG & Length)	10AWG, 1.2 mtr.
ESC Signal Control lead	JR-3P (White signal, Black GND)
ESC Telemetry lead	JR-3P (Yellow L, Red H, Black GND)
Protection/Warning	TBD

MOTOR	RD 10020
Motor KV Rating	160KV
Stator Poles / Magnet Poles	TBD
Motor Dimension	TBD
Recommended Propeller	TBD

Safe Operating Notes

1. Ensure adequate air flow for ESC and motor cooling during continuous high-load operation.
2. Actual Performance may vary depending on altitude, ambient temperature , air density, propeller type, air flow conditions, and installation configuration.
3. Do not exceed rated voltage, current, and throttle limits. Exceeding limits may cause overheating or permanent damage
4. It is recommended to maintain a 20-30% safety margin below maximum tested values for reliable long term operation
5. Ensure all electrical connections (battery, motor, and signal wires) are properly secured and insulated. Loose or poor connections may cause voltage fluctuations, overheating, or malfunction of the ESC.

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