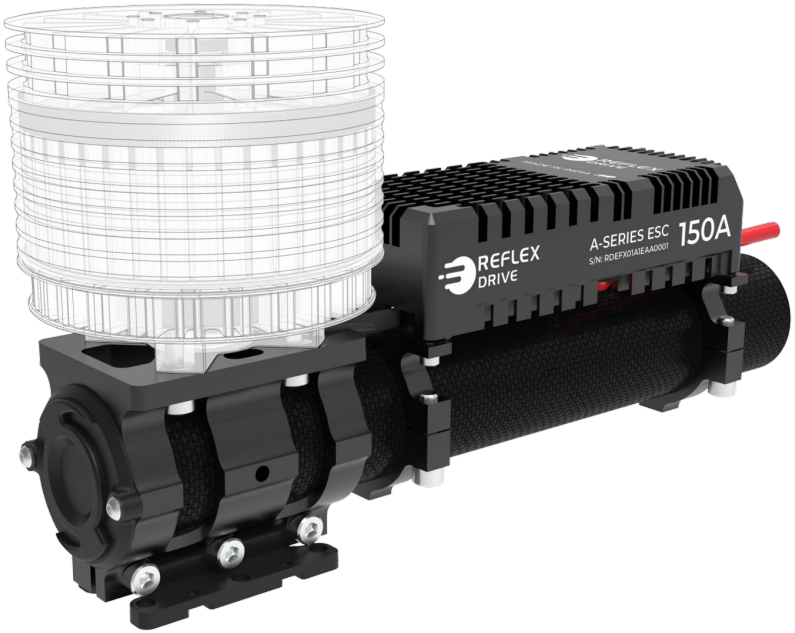
REFLEX® DRIVE

MADE IN INDIA

INTEGRATED PROPULSION UNIT

R9 IPU BASE (ESC and Mounting Only)

PRELIMINARY DATASHEET - SUBJECT TO CHANGE



FOC

Field oriented control

REFLEX® DRIVE

Email: sales@reflexdrive.in Sales: +91 9151118036 www.reflexdrive.in Lucknow, Hyderabad

REFLEX DRIVE®

PRELIMINARY DATASHEET - SUBJECT TO CHANGE

MADE IN INDIA



6S-12S	75A	150A	40mm
INPUT VOLTAGE	CONTINUOUS	PEAK CURRENT (30 SEC)	ARM TUBE OD

R9 IPU

INTEGRATED PROPULSION UNIT
BASE (ESC AND MOUNTING ONLY)

- The R9 IPU Base is supplied with the FOC 150A ESC and motor mounting only. The motor is not included.
- Built for motor manufacturers and UAV OEMs who bring their own motor. The fully enclosed ESC ensures reliable protection in demanding environments.
- Made in India with non-China sourced semiconductors, for payload, agriculture, surveillance, crop monitoring and spraying platforms.

SCOPE OF SUPPLY

Included: IPU base with integrated FOC 150A ESC and motor mounting.

Not included: motor.

BASIC PARAMETER

Product name	R9 IPU Base
Country of Origin	India
Throttle signal frequency	50-450Hz
Arm tube compatibility	D40 carbon tube (not included)
Operating Temperature	-20~65°C
Compliant	TBD
Certification	TBD

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

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

Safe Operating Notes
1. Ensure adequate air flow for ESC cooling during continuous high-load operation.
2.Actual Performance may vary depending on altitude, ambient temperature , air density, 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.

Email: sales@reflexdrive.in Sales: +91 9151118036 www.reflexdrive.in Lucknow, Hyderabad