

DESIGN AUTHORIZATION DATA SHEET Nº ERPAS-9897205

Authorization Holder:

SPEEDBIRD VEICULOS AEREOS NÃO TRIPULADOS S/A

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14403-610 Brazil ERPAS-9897205-01

Sheet 01

SPEEDBIRD DLV-2 DLV-2 A25

28 MAY 2025

This data sheet, which is part of Design Authorization Processes n° 00066.006340/2022-01 and 00066.005087/2024-22, prescribes conditions and limitations under which the product, for which the Design Authorization was issued, meets the requirements of the Brazilian Civil Aviation Special Regulation RBAC-E n° 94, Subpart E.

I - Model DLV-2, authorized in April 2024.

RPAS This is a Remotely Piloted Aircraft System (RPAS) that is comprised of a Remote

Piloted Aircraft (RPA), a Remote Pilot Station (RPS) software and other support

equipment.

RPA Type: Multirotor, Hexacopter.

Span: 2321 mm (91.4 in) (between rotor tips).

Height: 772 mm (30.4 in).

Empty weight: 12.5 kgf (without batteries and cargo box)

MTOW: 25 kgf.

Maximum payload weight: 6,5 kgf (cargo box included).

Maximum operational height: 120 m (400 ft) AGL.

Maximum airspeed: 80 km/h (22.22 m/s).

Operational airspeed. 60 km/h (16.67 m/s).

Maximum range: 24 km.

C2 LINK ANATEL Homologation Certificate (RPA): 06949-17-04809.

RPS Name/Model: Speedbird DLV-2 Remote Pilot Station

Type: compatible PC running the software Cloud Control Station, Wi-Fi

connection to 5GHz Router

Part Number: Joystick Controller Logitech F310 – Speedbird PN 74000010

SUPPORT EQUIPMENT Speedbird Aruco Marker Vinyl Board – PNs 38520001 (standard), 38520002

(mini)

FLIGHT LIMITATIONS 1. Daylight Visual Meteorological Conditions (VMC), airspace approved by DECEA Flight Authorization.

2. Beyond visual line of sight (BVLOS) up to 24 km (one-way) or 12 km (roundtrip) from take-off point. Maximum range must respect limitations as per Manual de Operação RPAS DLV-2 Speedbird Aero as function of batteries, cargo box and payload.

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- 3. Wind resistance: up to 29 km/h (8 m/s).
- 4. VLOS, EVLOS, and BVLOS operations require a lateral ground clearance of at least 30 m (98.4 ft) from the planned route to third parties and ground obstacles, unless otherwise permitted by a valid waiver.
- 5. Planned drone pads must be at least 50 m (164 ft) away horizontally and 20 m (65.6 ft) vertically from possible sources of electromagnetic interference (Radio / TV antennas, power lines, etc.).
- 6. Operation with any inoperative (or missing) instruments or equipment is prohibited.
- 7. Simultaneous operation of multiple RPA by a single remote pilot from a single remote pilot station is prohibited.
- 8. In case of failure of one of the engines, with the aircraft stabilized in flight, the operation must be aborted, followed by an immediate procedure for a safe landing. There must be a procedure for recording and reporting the engine failures occurring in service.

SERIAL NUMBERS APPROVED

All serial numbers eligible for BVLOS authorization.

AUTORIZATION BASIS Brazilian Civil Aviation Special Regulation RBAC-E No. 94 Amdt 02, Subpart E, dated 30 November 2021.

MANUAL SPD DLV-2 Manual de Operação RPAS - Rev10, issued on March, 2024 or later.

II -Model DLV-2 A25, authorized in May 2025.

RPAS This is a Remotely Piloted Aircraft System (RPAS) that is comprised of a Remote

Piloted Aircraft (RPA), a Remote Pilot Station (RPS) software and other support

equipment.

RPA Type: Multirotor, Hexacopter XRotor X6 Plus

(Hobbywing)

 Span:
 2200 mm (86.8 in)

 Height:
 650 mm (25.6 in)

Empty weight: 14 kgf (without batteries and cargo box)

MTOW: 25 kgf Maximum payload weight: 5 kgf

Minimum operational height: 50 m (164 ft) AGL Maximum operational height: 120 m (400 ft) AGL Cruising Speed - VC: 60 km/h (16.67 m/s)

ENVIRONMENTAL LIMITS

Temperature Envelope: -5°C to 50°C
Wind Limit: 35 km/h (9.8 m/s)
Gust Wind Limit: 53.7 km/h (14.9 m/s)
Precipitation Limit: Up to 5.0 mm/hour

Storm & Thunderstorm: No thunderstorms, lightning, or electrical activity

Visibility: VMC conditions Icing: No ice formation

Operational Ceiling: 2000 m (6550 ft) AMSL

Range with battery setup: 32Ah (4x 6S 16Ah) Round-trip

 Wind speed:
 up to 15 km/h
 up to 26 km/h
 up to 35 km/h

 Load:
 5 kg
 5 kg
 5 kg

 Range:
 5.5 km
 4.5 km
 4.0 km

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			One way			
		Load:	5 kgf	5 kgf	5 kgf	
		Range:	11 km	9 km	8 km	
		No Cargo:	13 km	12 km	10 km	
	Range with batter 44Ah (4x 6S 22A)		Round-trip			
		Wind speed:	up to 15 km/h	up to 26 km/h	up to 35 km/h	
		Load:	3 kgf	3 kgf	3 kgf	
		Range:	8 km	7 km	6 km	
		One way				
		Load:	3 kgf	3 kgf	3 kgf	
		Range:	16 km	14 km	12 km	
		No Cargo:	20 km	17 km	14 km	
BATTERY	Model:	FOXTECH	Solid-State Li-ion	n.		
	Capacity:	16,000 mAh or 22,000 mAh.				
	Battery setup:	4 units.				
	Total Weight: 6.0 kgf (16,000 mAh) or 8.0 kgf (22				1).	
CARGO BOX	Model:		ardbox			
	Mass:	0.8 kgf 1 kgf			rgf	
	Volume:	36 L				
	Ext. Dimensions:		370 x 370 x 307mm			
C2 LINK	ANATEL Homologation Certificate (RPA): 07669-19-02618.					
RPS	Name/Model: Speedbird DLV-2 A 25 Remote Pilot Station.					
	Type: compatible					
	connection\Wi-Fi connection to 5GHz Router, headset, mouse and joystick.					
SOFTWARE						
	Note: Major software changes or changes affecting safety must be approved.					
SUPPORT	1					
EQUIPMENT						
	Joystick Controlle	Joystick Controller Logitech F310 – Speedbird Part Number: 74000010.				
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FLIGHT TERMINATION

SYSTEM

Qualified for medium robustness as a Means of Compliance (MoC) to SORA mitigation measure M2, as documented in the report SPD_DLV-2 A25 Test Results for SORA M2.

The system consists of a ParaZero SmartAir Parachute Computer connected to the Nvidia Jetson Xavier NX Companion Computer via a serial communication cable, a pyrotechnic charge, and a GBS 10/350 parachute.

FLIGHT LIMITATIONS

- 1. Night and day flights under Visual Meteorological Conditions (VMC), airspace approved by DECEA Flight Authorization.
- 2. Beyond visual line of sight (BVLOS) up to 20 km (one-way) or 8 km (roundtrip) from take-off point. Maximum range must respect limitations as per Operational Manual as function of batteries, cargo box and payload.
- 3. VLOS, EVLOS and BVLOS operation requires a lateral ground clearance of 30 m (98.4 ft) from planned route to third parties and ground obstacles, unless otherwise allowed by a valid waiver or authorization.
- 4. Planned drone pads must be at least 50 m (164 ft) away horizontally and 20 m (65.6 ft) vertically from possible sources of electromagnetic interference (Radio / TV antennas, power lines, etc.).
- 5. Operation with any inoperative (or missing) instruments or equipment is

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SERIAL NUMBERS APPROVED	All serial numbers of DLV-2 A25 are eligible for	this authorization.		
AUTORIZATION BASIS	Brazilian Civil Aviation Special Regulation RBA dated 31 March 2023.	AC-E No. 94 Amdt 3, Subpart E,		
MANUAL	RPAS Operations Manual – DLV-2 A25, Speedb Aircraft Maintenance Manual – DLV-2, all variar later. Note: All manual revisions must be approved effective.	nts, Speedbird Aero, revision 4 or		
LIST OF DOCUMENTS	PD_DLV-2 A25 Lista de Documentos e Controle de Revisão – rev.04 (11600116)			

------ END ------

This DADS is available at ANAC website:

https://www.gov.br/anac/pt-br/assuntos/drones/projetos-autorizados