

DESIGN AUTHORIZATION DATA SHEET Nº ERPAS-2869676

Authorization Holder:

SANTIAGO & CINTRA IMPORTAÇÃO E EXPORTAÇÃO LTDA

Rua Barão do Triunfo, 88, 16º Andar, Conj. 1606 Brooklin Paulista, São Paulo/SP

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Brazil

ERPAS-2869676-00 Sheet 01

SENSEFLY EBEE CLASSIC/ EBEE CLASSIC RTK

16 April 2019

This data sheet, which is part of Design Authorization Process No. 00066.002002/2018-14, 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 No. 94, Subpart E.

I - Model eBee Classic and Classic RTK, authorized in April 2019.

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

Remote Piloted Aircraft (RPA), a ground station modem and a Remote Pilot

Station (RPS).

RPA Type: Single body flying wing.

Wingspan: 956 mm (38 in).

Material: EPP Foam, carbon structure & composite parts.

Assembly Units:

Fuselage Micro-servos for aileron actuation

SenseFly PN: SF000001 SenseFly PN: MCMOT00029

(See NOTE 9)

Engine

Manufacturer: AXI Model Motors

Model: AXI 2208/26

ANAC Engine Type Certificate: None

Type: Electric brushless motor

SenseFly PN: 60110

Engine Speed Controller (ESC)

Manufacturer: YGE Model: YGE30 SenseFly PN: 60337

Air Data Link Modem (Transceiver) 2.4 GHz

SenseFly PN: SF200090

ANATEL Homologation Certificate: 02048-15-

05976

GNSS Reception Board

eBee Classic

SenseFly PN: HWPCB00755

eBee Classic RTK SenseFly PN: 60263

Automatic Flight Module Manufacturer: SenseFly SenseFly PN: SI200001

Firmware version: 3.5.0 (See NOTE 5)

Pitot

Manufacturer: SenseFly SenseFly PN: SF200085

Ground Proximity Sensor Manufacturer: SenseFly SenseFly PN: SF200086

External Radio Antenna SenseFly PN: MCANT00009

Blisters

SenseFly PN: MCPLA01720

Battery Compartment SenseFly PN: 60269

Camera Compartment SenseFly PN: 60272

Leading Edge Cover Wing

SenseFly PN: SF200011 SenseFly PN:

Right: 60198 Left: 60203

ENGINE LIMITS

Nominal Static (PROPULSIVE UNIT LIMITS)

0.63 kgf (6.2 N)

Traction:

Maximum electrical 190 W

power input:

Maximum rotation: 9000 RPM

PROPELLER Manufacturer: APC Propellers

Model: 7"x5" Electric Pusher Propeller

PN: 7x5EP

ANAC Propeller Type Certificate: None.

Propeller fastening rubber rings

SenseFly PN: 60222

FUEL Not applicable.

BATTERY Manufacturer: Fullymax Battery Co. Ltd.

PN: 502-02-02

Type: Lithium polymer battery, 11.1V, 2150mAh, 24Wh.

ANTI-COLLISION

Manufacturer: Flytron

LIGHTS PN: L01

TRACKER Manufacturer: SenseFly

SenseFly PN: SF200004

C2 LINK Ground Station Modem (RPS) Manufacturer: SenseFly

Manufacturer: SenseFly SenseFly PN: SF200082

ANATEL Homologation Certificate: 02050-15-05976

RPS Software

Flight planning & execution software: eMotion

Manufacturer: SenseFly Model: eMotion 3

Software version: 3.5.0 (see NOTE 5)

AIRSPEED LIMITS

(IAS)

V_{NE}: 30 m/s (58.3 KIAS). V_{MIN}: 11 m/s (21.3 KIAS). V_{MO}: 25 m/s (48.6 KIAS).

C. G. RANGE 212 mm (8.35 in); +4.6 mm (0.18 in) -3.7 mm (0.15 in)

EMPTY WEIGHT C. G. NOTE 7

RANGE

DATUM Nose

LEVELING MEANS NOTE 7

MAXIMUM WEIGHT 0.75 kg (1.65 lb).

EMPTY WEIGHT eBee Classic: 0.460 kg (1.01 lb)

eBee Classic RTK: 0.465 kg (1.12 lb)

MINIMUM CREW One remote pilot.

NUMBER OF SEATS Not applicable.

FUEL CAPACITY Not applicable.

OIL CAPACITY Not applicable.

MAX. OPERATING

HEIGHT

400 ft (122 m) AGL (See NOTE 8).

NOMINAL ENDURANCE 50 minutes.

FLIGHT

LIMITATIONS

1. Daylight Visual Flight Rules (VFR) in visual meteorological conditions (VMC), airspace classes F or G.

2. Beyond visual line of sight (BVLOS) up to 5 km (2.7 nm) from remote pilot in command.

3. Wind resistance: up to 12 m/s (23 KIAS)

4. Operation is permitted in non-urban areas. NOTAM area shall be at least 150 meters (495 feet) away from urban areas.

5. Operation above ground infrastructure (e.g. power transmission lines, power stations, etc.) is prohibited unless authorized by its owner/operator.

6. Operation with any inoperative (or missing) instruments or equipment is prohibited.

7. BVLOS operation is prohibited in assisted or full manual mode (See NOTE 4).

SERIAL NUMBERS APPROVED

All serial numbers eligible for BVLOS authorization (See NOTE 8).

AUTHORIZATION

Brazilian Civil Aviation Special Regulation RBAC-E No. 94, Subpart E, dated

3 May 2017.

PRODUCTION BASIS

None (See NOTE 1).

NOTES:

BASIS

- NOTE 1 A declaration of conformity, issued by Santiago & Cintra, must be furnished for each aircraft at the time of its first inspection by ANAC.
- NOTE 2 Markings and placards: all markings and placards required by Brazilian Civil Aviation Special Regulation RBAC-E No. 94 must be installed in the appropriate locations.
- NOTE 3 The RPAS shall be operated and maintained under RBAC E-94 and in accordance with Santiago & Cintra Manual para Operadores Brasileiros AL-eBee-015 Rev. "1", dated January 2019, or later ANAC approved revision.

 The operation shall also be conducted in accordance with DECEA regulations applicable.
- NOTE 4 A remote controller may be provided by the manufacturer but its use is not part of this design authorization. Using the remote controller (operation in assisted manual or full manual modes) is prohibited while flying BVLOS.
- NOTE 5 eMotion 3.5 is applicable to RPAS eBee Classic and eBee Classic RTK.
- NOTE 6 The RPAS was tested up to 3030 m (10000 ft) AMSL.
- NOTE 7 The RPAS is approved for weight and balance obtained only from SenseFly approved payload. No weight and balance task is required before operation. Empty weight excludes weight from battery and payload modules.
- NOTE 8 Only aircraft which incorporated the modifications described in Service Bulletin SB-eBee-001 are eligible for BVLOS operations and receiving a declaration of conformity.
- NOTE 9 The RPA fuselage is sealed and its opening causes damage to its structure integrity. A statement from the manufacturer detailing all part numbers included in the fuselage assembly must be available to ANAC at the time of the aircraft inspection.

MÁRIO IGAWA

Gerente-Geral de Certificação de Produto Aeronáutico (General Manager, Aeronautical Product Certification)