

3. AS350 B3e® Baseline Aircraft Definition

The helicopter in the definition, presented hereafter, meets the certification standards for day and night VFR operations, set by the following airworthiness authorities: EASA, FAA, TC. This list is not restrictive and the status of approval by other airworthiness authorities must be checked. Additional equipment item may be required by the relevant operational regulation (most of them are available in catalogue).

GENERAL

- The AS350 B3e is certified with a pilot being on the right side
- The baseline aircraft is delivered with right side controls and fixed parts of the removable dual controls (the removable parts of removable dual controls are optional)
- Fuselage comprising the cabin and 3 luggage holds, with floor tie-down nets and access doors
- Tail boom with stabilizer, anti-torque rotor and fin with tail skid
- High skid landing gear with long footsteps (on right side and on left side), capable of taking handling wheels
- Lifting points
- Mooring fixtures
- Structural reinforcements for wire strike protection system
- External paint: fuselage painted in 1 to 3 colours according to standard paint schemes. Unless modified by optional item, the main rotor head cover and the skid landing gear are painted in grey
- Internal paint: grey (prevailing colour)
- Interior signs and markings: available in either French or English

COCKPIT / CABIN

- Cabin floor in light-alloy sheet-metal with tie-down rings
- 2 pilot and copilot high-back energy-absorbing seats, adjustable in reach, removable, complete with cushions, safety belts and shoulder harnesses
- 2 two-place rear bench-seats, foldable separately, complete with cushions, safety belts and shoulder harnesses
- 2 pilot and copilot jettisonable doors each fitted with a sliding window and with improved side-visibility window
 - 1 RH large front door
 - 1 LH front door
- Hinged rear right door-extension for passengers and cargo
- 1 rear left sliding door
- Locks on every access to cabin and luggage compartments
- Lock on fuel cap
- 2 tinted upper panes
- 1 ceiling housing the ventilation ducts and controls (ventilation controls, rotor brake and fuel cut-off)
- Cabin heating
- Demisting system for front windscreens
- Ram air ventilation duct
- Fixed parts for pilot and copilot windshield wipers
- 1 pilot document holder
- 1 fire-extinguisher
- 1 Flight Manual: available in either French or English
- Interior harmony according to definition in force

INSTRUMENTS

- 1 airspeed indicator
- 1 altimeter
- 1 vertical speed indicator
- 1 rotor tachometer indicator
- 1 clock
- 1 warning panel
- 1 magnetic compass
- 1 heated pitot head
- 1 external side slip indicator
- 1 control box for light and electrical generation
- 1 I.C.S. connection to audio warning issued from *VEMD*®
- 1 LCD Dual screen Vehicle and Engine Multifunction Display (*VEMD*®) providing the following information:
 - First limitation indicator (FLI)
 - ◆ torquemeter
 - ◆ exhaust gas temperature (T4)
 - ◆ gas generator tachometer (Ng, delta Ng)
 - Engine oil temperature/pressure
 - Fuel quantity
 - Fuel flow and estimated remaining time to fly
 - Ammeter, voltmeter and battery temperature
 - Outside Air Temperature (OAT)
 - Enhanced usage monitoring functions
 - ◆ IGE/OGE performance calculations
 - ◆ engine cycles counting
 - ◆ engine power check
 - ◆ overlimits display
 - *VEMD*® and peripheral maintenance information
 - Data downloading capability (software and connection wire as option)

AVIONICS

- 1 avionics master switch
- 1 gyro-horizon
- 1 gyro-directional
- 1 course Deviation Indicator
- 1 turn and bank indicator
- 1 VHF/VOR/LOC/GS
- 1 VHF/VOR/LOC/GS
- 1 transponder (mode A + C)
- 1 altitude encoder
- 1 Emergency Locator Transmitter
- 1 ICS + passenger interphone

POWER PLANT

- 1 Turboméca ARRIEL 2 D turbine engine complete with starting, fuel supply and dual channel digital engine control system (FADEC) and 1 back-up control that automatically controls the engine in case of total failure of the 2 digital channels of the FADEC
- 1 fuel system including 1 tank of 540 litres (143 US gal.) total capacity
- 1 twist grip on pilot side (for engine reduction in case of tail rotor failure and autorotation training)
- 1 magnetic plug and chip detector
- 1 engine lubrication and oil cooling system
- 1 fire detection system
- 1 air-intake protective grids
- 1 torque-measurement pick-up

TRANSMISSION SYSTEM

- 1 main gearbox, anti-vibration mounted, with oil sight gauge, chip detector, oil temperature and pressure switches, port for endoscope and self-sealing valve for oil sampling and draining
- 1 main gearbox oil cooling system
- 1 engine to main gearbox coupling shaft
- 1 rotor brake
- 1 main rotor high and low r.p.m. warning device
- 1 tail drive carried by five anti-friction bearings
- 1 tail gearbox with oil sight gauge, chip detector and port for endoscopic inspection

ROTORS AND FLIGHT CONTROLS

- 1 main rotor with 3 composite-material blades around a STARFLEX® head fitted with spherical thrust bearings
- 1 anti-torque rotor with 2 composite-material blades
- 3 main rotor hydraulic servo units
- 1 tail rotor hydraulic servo unit and a load compensation system

ELECTRICAL INSTALLATION

- One 150 A, 28 V DC starter-generator
- One 15 A.h cadmium-nickel battery
- 1 ground power receptacle
- 3 position lights (LED)
- 1 flashing anti-collision light (LED)
- 2 fixed landing lights
- 2 cabin dome lights
- 1 integrated instrument-panel lighting system
- Integrated lighting in central console
- 1 emergency and reading map light
- 2 cockpit breaker panels
- One 28 V DC cabin power outlet

AIRBORNE KIT ¹

- 1 pitot head cover
- 2 static port stoppers
- 1 engine air-intake blanking cover
- 1 tail-pipe plug
- 2 ground handling bogies c/w hydraulic jacking system
- 1 GHV modification kit
- 1 lifting ring
- 2 upper mooring rings
- 3 main-blade socks
- 1 tail rotor locking device
- 1 document holde
- 1 airborne kit stowage bag

¹ Weight not included in baseline aircraft empty weight.