

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 EC130 B4[®] is certified with a pilot being on the left side
- The baseline aircraft is delivered with left 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, FENESTRON[®] type anti torque rotor, and tail skid
- Tubular skid landing gear, with replaceable skid shoes, with long footsteps (on right and on left side), profiler on rear tube, capable of taking handling wheels
- Lifting points
- Mooring fixtures
- External paint: fuselage painted in 1 to 3 colours according to standard paint schemes. Unless modified by optional item, the main rotor head and tail rotor covers are painted in grey, the skid landing gear in dark grey and the FENESTRON[®] duct in light grey
- Internal paint: light grey (prevailing colour)
- Interior signs and markings: available in either French or English

CABIN

- Cabin floor in light-alloy sheet-metal
- 2 pilot and copilot high-back energy-absorbing seats, adjustable in reach, removable, complete with cushions, safety belts and shoulder harnesses
- 1 passenger high-back energy-absorbing seat (front right), removable, complete with cushions, safety belt and shoulder harness
- 4 passenger high-back energy-absorbing seats (rear row), removable, complete with cushions, safety belts and shoulder harnesses fitted on a removable frame bolted on the cabin floor
- 2 pilot and copilot jettisonable doors
 - 1 LH front door fitted with a sliding window
 - 1 RH large front door
- 1 LH rear sliding door
- 1 RH rear fixed panel
- Locks on every access to cabin and luggage compartments
- Lock on fuel cap
- Lateral and upper tinted windows (windscreen excluded)
- 1 ceiling housing the cabin lighting, 7 air ventilation outlets and controls (ventilation controls, rotor brake and fuel cut-off)
- Capabilities for mandatory optional item: air conditioning or ventilation systems
- Cabin heating
- Demisting system for front windscreens
- 2 pilot document holders
- Door map case in LH and RH front doors
- Floor carpet
- Rear bulkhead and lateral rear upholstery
- 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 LCD rotor and free turbine dual 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 ICS connection to audio warning issued from VEMD[®]
- 1 LCD dual screen Vehicle and Engine Multifunction Display (VEMD[®]) providing the following information:
 - First limitation indicators (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 and voltmeter and battery temperature
 - Outside Air Temperature (OAT)
 - Enhanced usage monitoring functions
 - ◆ IGE/OGE performance calculations
 - ◆ engine cycle 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-compass with
- 1 horizontal Situation Indicator
- 1 turn and bank indicator
- 1 VHF/VOR/LOC/GS
- 1 VHF/VOR/LOC/GS/GPS
- 1 transponder (mode A + C)
- 1 altitude encoder
- 1 Emergency Locator Transmitter
- 1 ICS + passenger interphone

POWER PLANT

- 1 Turboméca ARRIEL 2B1 632 kW (860 ch - 847 shp) turbine engine complete with starting, fuel supply and dual channel digital engine control system (FADEC) and 1 back-up fuel control box that automatically controls the engine in case of a total failure of the 2 digital channels of the FADEC
- 1 fuel system including 1 tank of 540 liters (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 1 chip detector
- 1 engine lubrication and oil cooling system
- 1 fire detection system
- 1 air-intake protection 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 (FENESTRON[®]) with 10 asymmetrical blades, integrated in vertical fin
- 3 main rotor hydraulic servo units (duplex servos)
- 2 independent hydraulic generation systems

ELECTRICAL INSTALLATION

- One 150 A, 28 VDC 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 light sets, each with 2 reading lights for 2 rear passengers and 1 dome light
- 1 integrated instrument panel lighting system
- Integrated lighting in central console
- 1 reading map light on upper canopy strut for pilot
- 1 cockpit breaker panel
- One 28 V DC cabin power outlet

AIRBORNE KIT (*)

- 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 lifting ring
- 2 upper mooring rings
- 3 main-blade socks
- 1 document holder
- 1 airborne kit stowage bag

(*) (weight not included in standard aircraft empty weight)