



HELICOPTERS

H135M

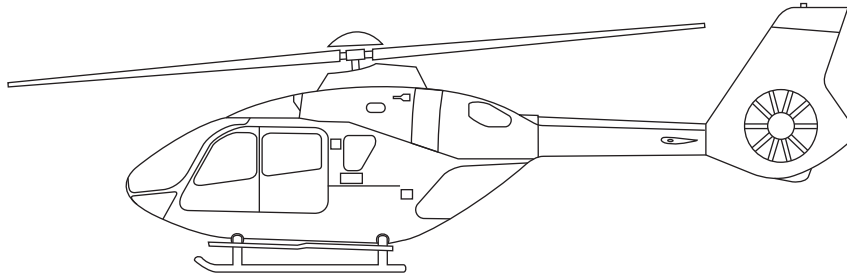
Technical Data

2017

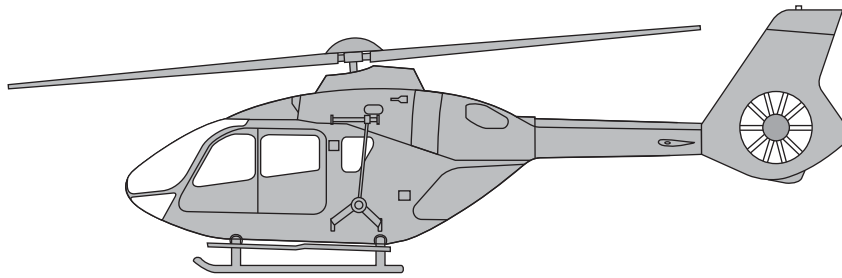


AIRBUS

H135
(Civil Version)



H135M
(Military Version)



3 Baseline Aircraft Definition

GENERAL

- Energy absorbing fuselage
- Tail boom with fixed horizontal stabilizer
- Vertical fin with faired-in Fenestron
- Upper deck with fittings for main gearbox, engines, hydraulic and cooling system
- Cowlings for main transmission and engine
- Skid-type landing gear with skid protectors, capable of taking ground-handling wheels
- Long boarding steps, LH and RH
- Maintenance built-in steps and grips
- Exterior painting (single color)
- Reinforcement of the LH and RH fuselage side structure with fixed provisions for multipurpose pylon LH and RH

COCKPIT, CABIN AND CARGO COMPARTMENT

- One-level cabin and cargo compartment floor with integrated rails
- Glazed canopy
- Two hinged cockpit doors with sliding window
- Map case in pilot's door
- Two wide passenger sliding doors
- Two rear hinged clam-shell doors
- Longitudinally adjustable energy absorbing pilot and copilot seats with head rest and 4-point safety belts with automatic locking system
- Cabin boarding grips LH and RH
- Interior paneling with integrated basic sound insulation
- Flight controls for pilot side; fixed provisions of flight controls for copilot side.
- Covers for copilot collective lever & cyclic stick
- Engine controls with manual engine back-up system at pilot's collective pitch lever
- Single pilot instrument panel including glare shield
- Slant console
- Ram-air and electrical ventilating system for cockpit and cabin
- Headset holder in the cockpit
- Headset holder in the cabin
- Portable fire extinguisher
- Stowage net for first aid kit at the LH rear clam-shell door
- Flash light (torch)
- NVG friendly cockpit, cabin and cargo compartment layout

INSTRUMENTS

- Flight Display Subsystem (FDS) composed of 2 smart multifunction displays (6 x 8 inch) providing the following functions:
 - Flight and Navigation Display (FND) format (incl. PFD, FLI, Master List, NAV, RPM, mast moment & fuel indication)
 - Vehicle Management System (VMS) format (incl. engine, gearbox, fuel, electrical system, RPM & clock indication)
- Vehicle Management System (VMS) including:
 - 2 duplex Aircraft Management Computer (AMC)
- Reference sensors:
 - 1 Attitude and Heading Reference System
 - Air Data sensor pilot side (electrically heated pitot tube and static port)
 - 1 Magnetometer
- Standby instruments:
 - Integrated Electronic Standby Instrument (IESI)
 - Standby compass
- Usage Monitoring System (UMS) - Helionix
- Flight Data Continuous Recorder (FDCR) - Helionix
- "One hundred feet" alert
- Directional Gyro Free Steering Mode
- Warning unit:
 - Engine fire warning with fuel emergency shut-off
 - Warning lights
 - Fire extinguishing system warning
- Cockpit Control Panel (CCP) for FDS
- Data Transfer Device (DTD)
- Engine switch panel

POWER PLANT

- Two Pratt & Whitney Canada PW206B3 turbine engines or two Safran Helicopter Engines ARRIUS 2B2^{plus} turbine engines
These two engines are equipped with:
 - Fire detectors
 - Full Authority Digital Engine Control (FADEC)
 - Chip detectors with quick-disconnect plugs
 - Overspeed protection system
 - Cycle indication on FDS
 - Twin-engine OEI-training mode
- Oil cooling and lubricating system with thermostatic valve
- Crash resistant fuel system with a flexible bladder-type fuel main tank and supply tank (split into two sections)
- Automatically controlled variable rotor speed system
- Fuel tank filler flap, lockable
- Drain system
- Fire walls

TRANSMISSION SYSTEM

- Flat-shaped main gearbox with two stages
- Chip detector system with quick-disconnect plug (main gearbox)
- Redundant oil cooling and lubrication system
- Main gearbox attachment with Anti-Resonance Isolation System (ARIS)
- Free wheel assemblies in the engine input drives
- Tail rotor drive shaft
- Tail rotor gearbox with splash lubrication and oil level sight gauge
- Chip detector system with quick-disconnect plug (tail rotor gearbox)

ROTOR AND FLIGHT CONTROLS

- Bearingless Main Rotor system (BMR) with improved dynamic characteristics, consisting of:
 - Rotor head / mast in one piece
 - Four fiber-reinforced composite main rotor blades with anti-erosion strips, control cuff, elastomeric lead-lag dampers and special blade tip painting
- Main rotor control system with dual hydraulic boost system
- Electrical trim system (cyclic)
- Basic provisions for an easy integration of a track and balance system
- Fenestron-type tail rotor with ten metal blades (asymmetric blade spacing) and stator
- Tail rotor gearbox cover
- Tail rotor control system with flexball cable and single hydraulic booster
- Digital 3-axis SAS (Stability Augmentation System)
- Mast moment system

ELECTRICAL INSTALLATION

- Two starter / generators (2x200 A, 28 VDC)
- Nickel-Cadmium battery, (24 V, 27 Ah)
- External power connector (STANAG 3302, LN9064, SAE AS 25018, SAE AS 35061)
- Power distribution system:
 - Two primary busbars
 - Two shedding busbars
 - Two essential busbars
 - Two high load busbars (80 A) - for optional equipment only
 - Two high power busbars (200 A)
 - Battery bus
- One utility receptacle in LH side of cargo compartment (28 VDC, 10 A)
- Lighting:
 - Anti-collision warning light (red flashing), LED
 - Fixed, nose-mounted landing light
 - Three position lights (red, green, white), LED
 - Adjustable instrument lighting
 - One utility light in the cockpit
 - 5 spot-lights in the cabin
 - One light in cargo compartment RH side
- Radio:
 - Two radio master switches

GROUND HANDLING KIT^a

- Two ground-handling wheels
- Basic aircraft covers (short term)
- Main rotor blade tie-down lash bags
- Oil drain kit
- Fuel tank drain device
- Keys for cockpit doors, cabin doors, baggage compartment doors and tank flap (one-key system)
- Battery key
- Lifting points
- Maintenance Ground Station (MGS)
- Airbus Helicopters Data Loader (AHDL)
- Flight Continuous Data Recorder (FDCR) converter

a. Weight not included in the standard helicopter empty weight.

DOCUMENTATION (in English)^a

- One Flight Manual^{ab} (on paper)
- One Pilots Checklist^c (on paper)
- One Master Minimum Equipment List (MMEL)^a (online via T.I.P.I)
- One Logbook (on paper, CD-ROM on demand)
- One Historical Record (on paper, CD-ROM on demand)
- Technical Documentation^a incl. AMM, SDS, WDM, IPC, MSM, CECG, SRM online via KEYCOPTER[®] portal
- Service Bulletin Catalogue (SB) online via T.I.P.I
- List of Applicable Publications (LOAP)^a online via KEYCOPTER portal
- One Avionics Manual^d (for avionics installed by Airbus Helicopters) (on CD-ROM)
- One ECMM^c (Electronic Component Maintenance Manuals) for vendor manuals
- One Engine Documentation^e (format depends on engine manufacturer), furnished by supplier, including:
 - Maintenance Manual
 - Illustrated Parts Catalogue

a. Revision service included as long as the aircraft is operational

b. One Flight Manual included in the standard helicopter empty weight

c. Revision service for 3 years

d. Customized documentation

e. Revision service for 3 years for Safran HE, 2 years for PWC

AIRBUS

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