



HELICOPTERS

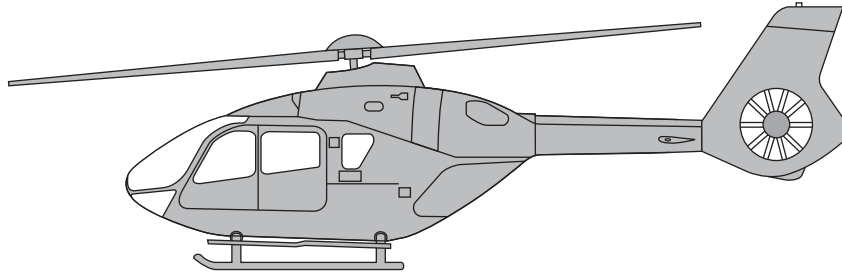
# H135

Technical Data  
2017



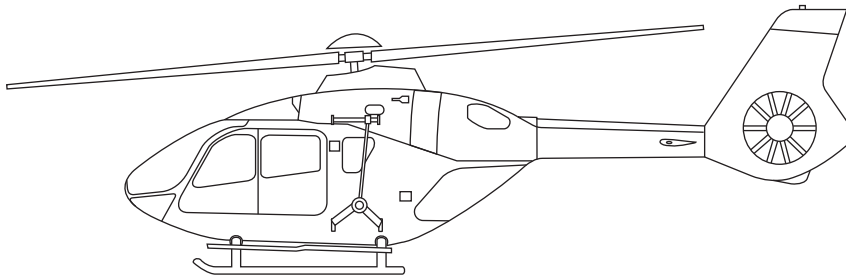
**AIRBUS**

**H135**  
(Civil Version)



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**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)

### 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
- Instrument panel with extension and glare shield on pilot's side and 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) for pilot side

### 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<sup>plus</sup> turbine engines
  - Twin-engine OEI-training mode
  - Oil cooling and lubricating system with thermostatic valve
  - Crash resistant fuel system with a flexible bladder-type main tank and supply tank (split into two sections)
  - Automatically controlled variable rotor speed system
  - Fuel tank filler flap, lockable
  - Drain system
  - Fire walls
- 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

## 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
- 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 VDC, 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<sup>a</sup>

- 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 Data Continuous Recorder (FDCR) converter

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

## DOCUMENTATION (in English)

- One Flight Manual<sup>ab</sup> (on paper)
- One Pilots Checklist<sup>c</sup> (on paper)
- One Master Minimum Equipment List (MMEL)<sup>a</sup> 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<sup>a</sup> incl. AMM, SDS, WDM, IPC, MSM, CECG, SRM online via Keycopter<sup>®</sup> portal
- Service Bulletin Catalogue (SB) online via T.I.P.I.
- List of Applicable Publications (LOAP)<sup>a</sup> online via Keycopter portal
- One Avionics Manual<sup>d</sup> (for avionics installed by Airbus) (on CD-ROM)
- One ECMM<sup>c</sup> (Electronic Component Maintenance Manuals) for vendor manuals
- One Engine Documentation<sup>e</sup> (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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Photos: AIRBUS HELICOPTERS  
Cover photo: © Christian Keller - 2016  
Printed by SPI (France)

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