H135

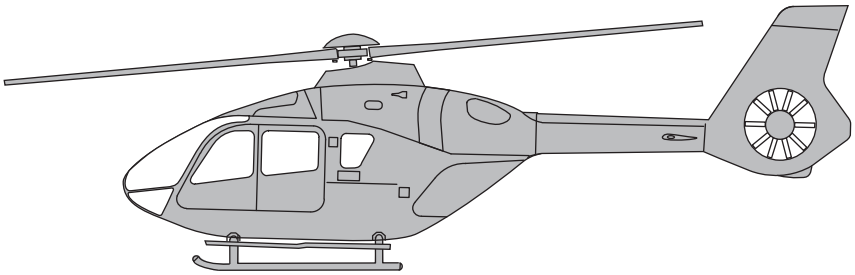
Helionix®

Technical Data

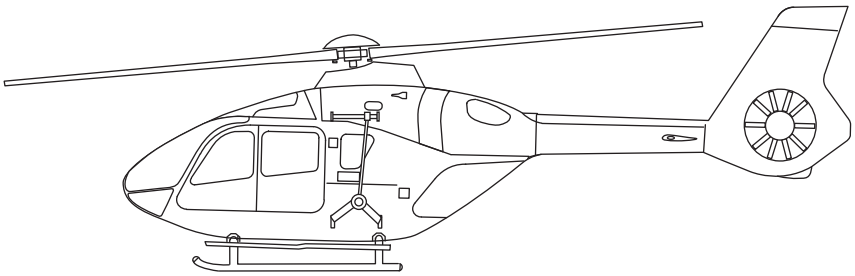
2016

AIRBUS HELICOPTERS

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)

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

BASIC INSTRUMENTATION

- Flight Display Subsystem (FDS) composed of 2 smart multifunction displays (6 x 8 inch) providing the following functions:
  - Flight Navigation Display (FND) format
  - Vehicle Monitoring Display (VMD) format
- Vehicle Management Subsystem (VMS) including:
  - 2 duplex Aircraft Management Computer (AMC)
- Reference sensors:
  - 2 Inertial Measurement Units
  - 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)
- "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 PW206B3 turbine engines or Two Turbomeca 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

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

DOCUMENTATION (in English)

- 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[ad] 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[e] (for avionics installed by Airbus Helicopters) (on CD-ROM)
- One ECMM[c] (Electronic Component Maintenance Manuals) for vendor manuals
- One Engine Documentation[f] (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 AMM, SDS, WDM and IPC versions available on request
e. Customized documentation
f. Revision service for 5 years for TM, 2 years for PWC

Designed by AIRBUS HELICOPTERS
Photos: AIRBUS HELICOPTERS
Cover photo: © Thomas Weber - 2015
Printed by SPI (France)

135 T3H/P3H 16.100.01 E