

HELICOPTERS

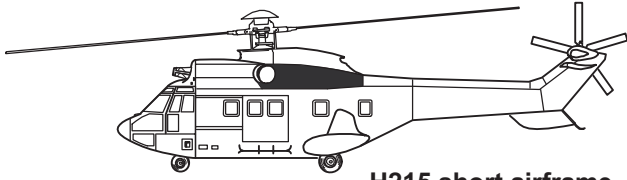
# H225

Technical Data  
2019

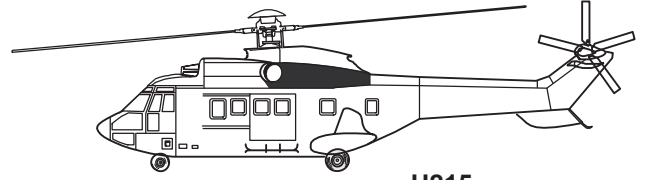


**AIRBUS**

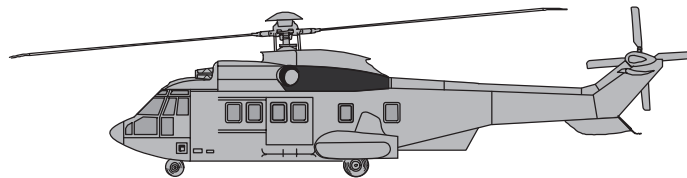
**SUPER PUMA**  
(Civil Version)



H215 short airframe



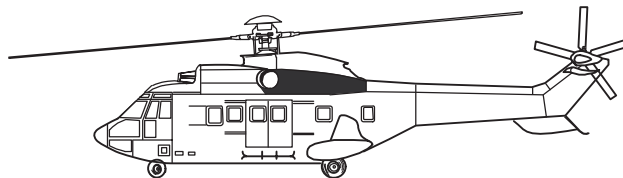
H215



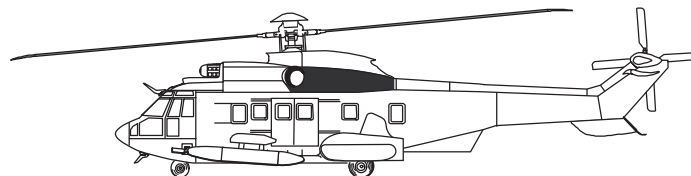
H225

---

**COUGAR**  
(Military Version)



H215M



H225M

## 3 Baseline Aircraft Definition

### GENERAL

- Energy absorbing design fuselage including cockpit and cabin
- Composite material intermediate structure
- Polyurethane white paint and Dinol AV30 re-inforced anti-corrosion treatment
- Monocoque tail boom with tail rotor protection and stabilizer
- Front part of the tail boom arranged as a luggage compartment
- Fuselage upper part used as transmission deck
- Multipurpose sponsons with energy absorbing self-sealing fuel tanks
- Fuselage lower part fittable with floatation gear
- Engine cowlings serving as a work platform when in the open position
- Provisions for external pod fuel tanks
- High energy absorption, retractable, tricycle landing gear with trailing-arm main landing gear and castering nose wheel unit
- Footsteps for climbing to the transmission deck, the cockpit and the cabin
- Built-in jacking and towing points
- Provisions for attaching gripping points
- Interior paint : light beige
- Exterior paint: the fuselage is painted following customer paint scheme (polyurethane finish) ; the landing gears are grey and unless otherwise specified, the optional equipments keep their original colors
- Active Vibration Control System

### COCKPIT

- 2 pilot and copilot crashworthy seats adjustable in height and fore-and-aft, complete with safety belts and extensible shoulder harnesses
- 3 sun vizors
- Dual flight control
- Steadying rods at pilot station
- Engine controls
- Master cut-off switches
- Rotor brake control
- Landing gear control
- Differential wheel brakes at pilot and copilot stations
- 2 map cases on pilot and copilot doors
- 1 Flight Manual
- Instrument panel and cockpit painted in black
- 1 hand fire extinguisher
- De-iced pilot and copilot windshield panes with wiper
- 2 hot air diffusers
- 3 windshield pane demisting ramps
- 4 adjustable ventilation outlets
- Windshield washer
- 2 jettisonable doors with door-stops
- Enlarged footsteps cockpit
- Cockpit grey tinted upper panes
- Access to cabin with partitioning curtain
- Lightweight Aircraft Recording System

### INSTRUMENTS

- 4 multifunction 6" x 8" landscape LCD displays
- 2 display and autopilot control panels
- 1 Integrated Standby Instrument System (ISIS) for airspeed, altimeter and gyro-horizon back-up display
- 1 redundant Vehicle Monitoring System (VMS) with one redundant Aircraft Management Computer (AMC) and two 4" x 5" LCD displays
- 2 stop watches
- 2 triple tachometers
- 1 warning panel
- 1 fuel circuit control and monitoring panel with 2 fuel content displays
- 1 AC/DC control box
- Required Navigation Performance Approach (RNP APCH), up to LPV
- Airbus interactive digital map
- 2 iapps Helitab IOS
- 1 engine starting panel
- 1 landing gear position control and monitoring panel
- 2 heated pitot heads and 6 static vents
- 1 ventilation/heating system control panel
- Instruments units available in English units (Altimeter in feet and Airspeed indicator in kts); other units on request
- 1 digital intercommunication system – 3 control panels
- 1 VOR/ILS/ADF/MKR receiver
- 1 VOR/ILS/MKR receiver
- 1 DME receiver (twin channel)
- 1 transponder (with S mode and ADS-B out)
- 1 Emergency Locator Transmitter with integrated GPS
- 2 radio altimeters displayed on multifunction LCDs
- Rig'N Fly
- 2 Flight Management System
- 2 GPS
- Tail fin camera

### CABIN

- Multipurpose integrated crashworthy floor fitted with rails and cargo tie-down rings, capable of accommodating various types of seat arrangements available as option
- 2 jettisonable sliding plug doors
- 12 jettisonable windows (including 4 on the sliding doors)
- Enlarged cabin grey tinted windows
- 1 rear step door
- 1 hand fire-extinguisher
- Soundproofing upholstery (light beige padded cloth)
- Heating and ventilation (upper outlets adjustable for direction and flow, plus bottom adjustable for flow)

### POWER PLANT

- 2 Turbomeca MAKILA 2A1 1776 kW (2382 shp) maximum emergency power blade shedding turbines engines in two separate groups with own starting, feeding, lubricating, and cooling systems
- 2 redundant full digital FADEC including a O.E.I. training mode
- 1 fuel system of 2,588 litres (684 US gal.) usable capacity comprising 8 energy absorbing tanks, arranged in 2 groups, 4 booster pumps, 1 transfer pump and a low/high fuel warning system.
- 2 engine bay fire-detection systems
- 1 two-cylinder selective fire-extinguishing system
- 2 chip detectors
- Engine air intakes protected against icing by grids and heating mats on the air intakes stub frames
- 1 engine flushing device without removal of cowlings
- 1 cycle counting system

## TRANSMISSION SYSTEM

- 1 main gearbox (MGB) on flexible mountings with 3 chip detectors one of which with fuzz burner, oil sight gauge, oil temperature and pressure sensors and torque meter pick-ups, 2 lubrication pumps and independent circuits
- 1 intermediate gearbox with magnetic plug, oil sight gauge and temperature sensor
- 1 tail gearbox (TGB) with magnetic plug, oil sight gauge and temperature sensor
- 1 MGB oil cooling system
- 1 MGB oil emergency cooling system
- 1 MGB total loss of oil spray device
- 1 rotor brake
- 2 MGB bay fire detection circuits
- 1 MGB max oil temperature warning
- 1 MGB min oil pressure warning
- 1 TGB max oil temperature warning
- Full Flight Magnetic Plug

## ROTOR AND FLIGHT CONTROLS

- 1 articulated main rotor with 5 composite-material blades equipped with gust and droop stops
- 1 anti-torque rotor with 4 composite-material blades
- 1 flying control system, fitted with 4 dual-body servo-units (3 on the cyclic and collective pitch channels and 1 on the anti-torque rotor pitch control channel) with 2 chambers per body
- Capability for main rotor blade folding system
- 1 dual/duplex digital autopilot associated with 2 flight data computers and back-up capabilities

## ELECTRICAL INSTALLATION

- Two 30/40 kVA, 115/200 V, 400 Hz alternators
- One 43 amp.-hr cadmium-nickel battery
- 2 transformer-rectifiers
- One 4 amp.-hr stand-by battery
- One 26 V, 400Hz transformer
- 1 cockpit lighting system including :
  - green pedestal instrument and overhead panel integrated lighting
  - white general lighting
  - 1 white extension light
  - 2 white map lights
  - 1 storm light
- 1 cabin lighting system made up of two-lighting strips, plus signs : "Emergency Exit"
- 6 receptacles for ancillaries (28 V, 15 amp.)
- 1 receptacle for ancillaries (28 V, 25 amp.)
- 2 external power receptacles (AC and DC)
- Two 600 W landing lights
- 3 position lights LED
- 1 bi-mode (red/white) high-intensity anti-collision strobe light LED on tail fin

## HYDRAULIC GENERATION

- 2 independent hydraulic systems :
  - the LH system feeds one of the servo-unit bodies, the autopilot, the landing gear control, the rotor brake and wheel brakes
  - the RH system feeds the other body of the servo-units
- Hydraulic ground couplings
- 1 DC auxiliary electropump on stand-by for the LH system and for supplying sufficient hydraulic pressure for movement of the controls on the ground before starting in high winds
- 1 stand-by electropump for complete lowering of the landing gear
- Provisions for hydro-electric group installation

## AIRBORNE KIT <sup>(1)</sup>

- 6 static vent blanks
- 2 pitot head covers
- 1 engine air-intake grid protection cover
- 2 engine tail-pipe blanks
- 4 mooring rings
- 2 rough-weather mooring fittings (included on the aircraft)
- 1 access ladder
- 1 data case
- 3 jacking ball-joints
- Main blade tie-down
- Fuel bleed line
- 1 stowing bag for the airborne kit

<sup>(1)</sup> (Weight not included in standard aircraft empty weight)

# AIRBUS

© AIRBUS HELICOPTERS, Aeroport International  
Marseille Provence - 13725 Marseilles Cedex -  
France - 2019 - All rights reserved

Airbus Helicopters' logo and the names of its  
products and services are registered trademarks.  
Airbus Helicopters reserves the right  
to make configuration and data changes  
at any time without notice. The facts and  
figures contained in this document and  
expressed in good faith do not constitute any  
offer or contract with Airbus Helicopters.

Designed by AIRBUS HELICOPTERS

Photos: AIRBUS HELICOPTERS

Cover photo: © Airbus Helicopters/Anthony Pecchi

Printed by SPI (France)

225 LP 19.100.01 E