

1 Baseline Aircraft Definition

GENERAL

- | | |
|--|---|
| <ul style="list-style-type: none"> • Energy absorbing fuselage • Tail boom with fixed horizontal stabilizer and vertical fin with faired-in Fenestron® • Upper deck with fittings for main gearbox, engines, hydraulic and cooling system • Cowlings for main transmission and engines | <ul style="list-style-type: none"> • Skid-type landing gear with skid protectors, capable of taking ground-handling wheels • Long boarding steps, LH and RH • Cold weather kit • Built-in maintenance steps and grips • Exterior painting (single color) |
|--|---|

COCKPIT, CABIN AND CARGO COMPARTMENT

- | | |
|--|--|
| <ul style="list-style-type: none"> • 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 with window of push-out type • 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; seat color grey or blue • Cabin boarding grips (LH and RH) • Interior paneling with integrated basic sound insulation • Flight controls (pilot side) • Instrument panel with extension on pilot's side and glare shield | <ul style="list-style-type: none"> • Ram-air and electrical ventilating system for cockpit and cabin • Bleed air heating system^a • Ventilation for avionics deck^{ab} • Headset holder in the cockpit, rotatable • Portable fire extinguisher • Stowage net for first aid kit at the LH rear clam-shell door • 2 flashlights (torches) • Slant panel • Center console • Windscreen wiper for pilot and copilot • Door open warning |
|--|--|

- a. System in addition to EC145 Baseline Aircraft Definition
 b. If required by final configuration

BASIC INSTRUMENTATION

- | | |
|---|--|
| <ul style="list-style-type: none"> • Flight Display Subsystem (FDS)^a composed of 2 smart multifunction displays (6 x 8 inch) providing the following functions: <ul style="list-style-type: none"> • Flight Navigation Display (FND) page • Vehicle Monitoring Display (VMD) pages • Vehicle Management Subsystem (VMS)^a including: <ul style="list-style-type: none"> • 2 duplex Aircraft Management Computer (AMC) • Reference sensors <ul style="list-style-type: none"> • 3 Inertial Measurement Unit (IMU) • 2 Air Data sensors (electrically heated pitot tube and static port) • 2 Three Axis Magnetometers (TAM) • Stand-by instruments <ul style="list-style-type: none"> • Integrated Electronic Standby Instrument (IESI)^a • Stand-by compass | <ul style="list-style-type: none"> • Usage Monitoring System (UMS)^a • „One hundred feet“ alert^a • Directional Gyro Free Steering Mode^a • Warning unit: <ul style="list-style-type: none"> • Engine fire warning with fuel emergency shut-off • Warning lights • Fire extinguishing system warning • MFC panel^a • Data Transfer Device (DTD)^a • Engine switch panel: <ul style="list-style-type: none"> • Digital engine control (FADEC) • Radar altimeter^a |
|---|--|

- a. System in addition to EC145 Baseline Aircraft Definition

POWER PLANT

- | | |
|---|--|
| <ul style="list-style-type: none"> • Two TURBOMECA ARRIEL 2E turbine engines with electronic engine control (double channel FADEC) • Crash resistant fuel system with a flexible bladder-type fuel main tank and supply tank (split into two sections) • Two independent oil cooling and lubrication systems of the engines • Fire detection and extinguishing system | <ul style="list-style-type: none"> • Chip detectors with quick-disconnect plugs • Twin-engine OEI-training mode • Automatically controlled variable rotor speed system • Cycle counter • Drain system • Fire walls |
|---|--|

TRANSMISSION SYSTEM

- | | |
|---|--|
| <ul style="list-style-type: none"> • Main transmission including an independent redundant lubrication system and monitoring sensors • Chip detector system with quick-disconnect plug (main transmission) • Free wheel assemblies in the engine input drives | <ul style="list-style-type: none"> • Rotor brake system • Tail rotor transmission system with splash lubrication and oil level sight gauge • Chip detector system with quick-disconnect plug (tail rotor gearbox) |
|---|--|

ROTOR AND FLIGHT CONTROLS

- | | |
|--|---|
| <ul style="list-style-type: none"> • Hingeless main rotor (System Bölkow) with 4 glass and carbon fiber reinforced blades with erosion protection strip • Fenestron®-type tail rotor with ten composite blades (asymmetric blade spacing) and stator • Tail rotor gearbox cover • Basic provisions for an easy integration of a balancing system | <ul style="list-style-type: none"> • Dual hydraulic boost system for cyclic and collective blade control of the main rotor • Tail rotor control system with flexball cable and dual hydraulic booster • Main rotor blade tip painting (yellow) • Mast moment system • Dual Duplex 4-axis Digital Automatic Flight Control System including upper modes^a |
|--|---|

a. System in addition to EC145 Baseline Aircraft Definition

ELECTRICAL INSTALLATION

- | | |
|--|---|
| <ul style="list-style-type: none"> • Power generation system: <ul style="list-style-type: none"> • Two starter/generators (2 x 200 A, 28 VDC) • Nickel-Cadmium battery, (24 V, 40 Ah) • External power connector (STANAG 3302) • Power distribution system: <ul style="list-style-type: none"> • Two primary busbars • Two essential busbars • Two shedding busbars • Two non-essential busbars (80 A) for optional equipment only • Battery bus • One utility receptacle in cargo compartment (28VDC, 20A) • DC power control | <ul style="list-style-type: none"> • Lighting: <ul style="list-style-type: none"> • Anti-collision warning light (red flashing), LED • Fixed landing light (250 W) • Three position lights (red, green, white), LED • Adjustable instrument lighting • One utility light in the cockpit • Lights in the cabin and cargo compartment • Boarding illumination • Emergency lights • Radio: <ul style="list-style-type: none"> • Two radio master switches |
|--|---|

GROUND HANDLING KIT^a

- | | |
|--|--|
| <ul style="list-style-type: none"> • Two ground-handling wheels • Basic aircraft covers (short time) • Oil drain hoses • Keys for cockpit doors, cabin doors, baggage compartment doors and tank flap (one-key system) | <ul style="list-style-type: none"> • Battery key • Lifting points • Compass compensation key • Fuel drain device |
|--|--|

a. Weight not included in the standard helicopter empty weight

DOCUMENTATION (in English)

- | | |
|--|---|
| <ul style="list-style-type: none"> • One Flight Manual^{a b} (on paper) • One Pilots Checklist^c (on paper) • Master Minimum Equipment List (MMEL)^a • One Logbook (on paper, CD-ROM on demand) • One Historical Record (on paper, CD-ROM on demand) • One Web-based application^a incl. AMM, SDS, WDM, IPC, MSM, CECG, SRM^d • Service Bulletin Catalogue (SB) online via T.I.P.I. | <ul style="list-style-type: none"> • One List of Applicable Publications (LOAP)^a online via T.I.P.I. • One Avionics Manual^e (for avionics installed by Airbus Helicopters) (on paper) • One CD-ROM ECMM^c (Electronic Component Maintenance Manuals) for vendor manuals • Engine Documentation^f (on paper or CD-ROM), furnished by supplier, including: <ul style="list-style-type: none"> • Maintenance Manual • Illustrated Parts Catalogue (IPC) |
|--|---|

- 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