

Civil

EC145 T2

The newest Airbus Helicopters solution for today's most demanding operations



A VERSATILE MULTI-ROLE HELICOPTER, WITH DESIGNED-IN MISSION CAPABILITY AND FLEXIBILITY



The EC145 T2 is the newest 4-ton-class lightweight twin-engine helicopter in Airbus Helicopters' product range. This is a "hot-and-high" evolution of the company's multi-purpose EC145/BK117 family, and retains excellent performance levels throughout the flight envelope – even in extreme conditions.

With a large roomy cabin, the EC145 T2 can accommodate up to 12 seats for passengers and one/two pilots.

To date, more than 800 EC145/BK117 helicopters have been delivered worldwide, logging an accumulated total of more than three million flight hours.

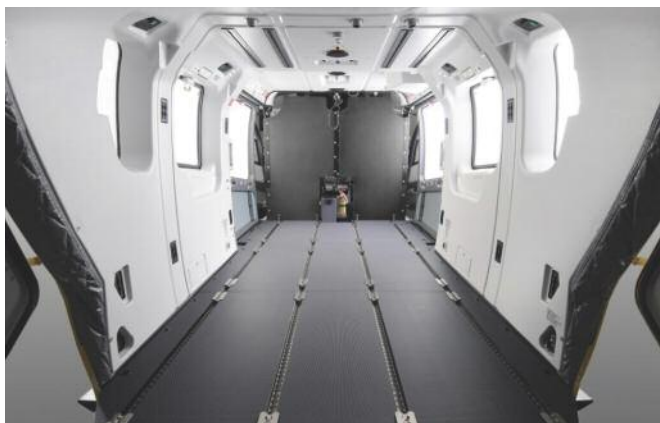
- > 2 Powerful Arriel 2E Engines, with FADEC (Dual-Channel Full Authority Digital Engine Control) and engine data recorder
- > Upgraded main gear box
- > 4-axis autopilot
- > State-of- the-art avionics suite: Helionix[®], a family concept for Airbus Helicopters' modern product line
- > Safe & Silent Fenestron[®] Tail Rotor
- > High-set tail boom produced with lightweight composite materials



One platform: a full range of missions

The EC145 T2 provides a multitude of possibilities when it comes to deployment capability due to its power, advanced mission equipment, small footprint and large cabin size.





From entry-in-service, this helicopter is qualified for single pilot/dual pilot operation, VFR-capable day and night, IFR, night vision goggle compatibility, and excellent CAT A performance levels.

Based on a platform that is recognized as a reference worldwide, the EC145 T2 is perfectly suited for:

- Emergency medical services (EMS) missions
- Law enforcement/parapublic duties

A further choice of aircraft configurations allows unique adaptability in a wide range of dedicated applications in:

- Business and commercial aviation
- Aerial work (windmill maintenance, firefighting...)

With its comprehensive state-of-the-art options, incomparable performance levels and complementary equipment for "quick role change," the EC145 T2 is easily reconfigurable for such secondary missions as:

- Search and rescue
- Offshore/oil and gas passenger transport



A helicopter that accomplishes the

Offshore

Oil & gas passenger transport

- Certified FAR29 for increased safety
- Long-range capability
- Reduced operational costs
- Capacity to transport up to 10 passengers
- Compact size, enabling landing in confined areas

> FULL PROVISIONS OFFERED AS REQUIRED BY EASA OPS

- Color weather radar system
- Emergency flotation system
- External life raft
- Helicopter emergency egress lighting (HEEL)
- Automatic deployable emergency locator transmitter

EMS

Suitable for primary/secondary missions

> QUICK, EASY AND SAFE LOADING/ UNLOADING OF PATIENTS

- High-set main rotor and Fenestron® shrouded tail rotor allows operations even with the engines running
- Sliding side doors
- Two large rear clamshell doors

> SPACIOUS, UNOBSTRUCTED CABIN

- Extensive space, providing full body access and greater comfort for the medical crew
- 1 or 2 stretcher capability with full/partial suite of medical equipment

> EXTREMELY LOW SOUND LEVELS

- Can operate in and around hospitals and urban areas with little disturbance



Law enforcement/parapublic

Versatile and “quick role change” capability

> POLICE CONFIGURATION

The night vision goggle-compatible arrangement is equipped with:

- A powerful searchlight
- An external hoist
- Capability for external roping, with two persons simultaneously on each side

> ADDITIONAL EQUIPMENT AND PACKAGES

- Electro-optical system fitted with searchlight-slaving mode
- Digital video recorder
- Video downlink
- Operator workstation in the cabin

job, no matter what the mission



Business and commercial aviation

Maximum comfort and optimum working conditions

- Easy cabin access
- Spacious and stylish interior with outstanding external visibility
- A wide variety of seating arrangements
- Substantial room for baggage

> NEW "STYLENCE" INTERIOR DESIGN

- Highly effective soundproofing
- Automatically-controlled air-conditioning system
- Further reductions in vibration levels



Search and rescue

Suitable for both onshore and offshore missions

- Long-range capability
- Large cabin size
- New glass cockpit with innovative human-machine interface to reduce crew workload
- SAR-dedicated equipment
 - High-definition forward-looking infrared sensor
 - Search radar
 - Digital moving map
 - Left- or/and right-hand hoist installation capability

Unrivalled performance



> NEWLY-DESIGNED ENGINES

The EC145 T2 is equipped with two modern and powerful Turbomeca Arriel 2E engines, each controlled by a fully redundant dual channel Full Authority Digital Engine Control (FADEC).

They provide outstanding performance in all engine operative (AEO) operations, along with vital power reserves in one engine inoperative (OEI) scenarios. Includes an OEI training mode.

In compliance with EASA-OPS regulations, the EC145 T2 allows Cat A operations up to Class 1 performance levels at full maximum takeoff weight (ISA + 20°C, from Sea level up to 5,500 ft PA).

> A STATE-OF-THE-ART 4-AXIS AUTOPILOT

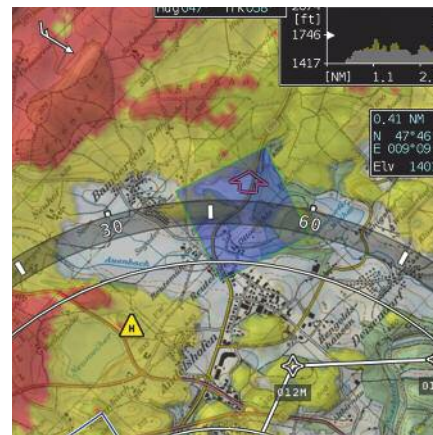
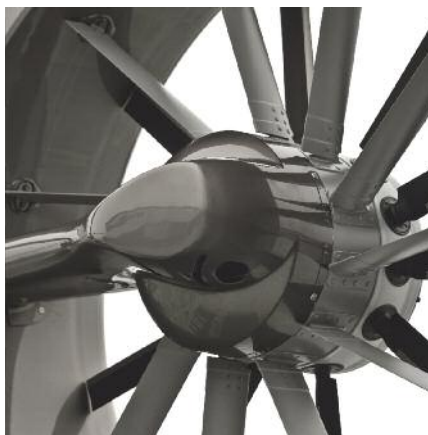
The EC145 T2 fully benefits from Airbus Helicopters' unique experience in autopilot systems, and is equipped with the most advanced dual-duplex, 4-axis Automatic Flight Control System (AFCS) specifically designed for helicopters. It offers unparalleled pilot assistance with automatic modes integrated in the AFCS:

- High flight stability and precision from 0 kts up to VNE (Velocity Never Exceed)
- Airbus Helicopters' unique flight envelope and over-limit protection
- Automated takeoff and fully-coupled approaches (ILS or LPV) down to hover
- Automatic management of engine failure during cruise, take-off and hover

> UPGRADED MAIN GEAR BOX

The EC145 T2's main gear box has been enhanced to handle higher loads, and is certified for a 30-minute dry-run capability.

A new level of safety



The EC145 T2 is certified according to the latest FAR Part 29 airworthiness standards, setting the bar even higher when it comes to in-flight and on-ground safety features.

With an advanced glass cockpit and avionics suite, as well as a distinct combination of innovative and proven technologies, the EC145 T2 reduces pilot workload and provides the highest possible safety levels:

- Two fully-interchangeable (6 x 8-inch) multifunction displays and a third 100% dedicated to Flight and Navigation systems - for safety purposes. Each screen has autonomous computation
- One central Vehicle Monitoring System providing engine and vehicle data
- A color-coded warning and information concept
- A first limit indicator (FLI) to facilitate engine and torque monitoring
- One integrated electronic standby instrument (IESI)

> 360° SAFE APPROACHABILITY

- High-set main rotor (3.10 meters)
- High-set tail boom (1.90 meters)
- Fenestron® shrouded tail rotor with high damage tolerance

> ENHANCED SITUATION AWARENESS INTEGRATING

- Digital moving map
- Helicopter terrain awareness and warning system (H TAWS)
- Synthetic vision system and Electronic Flight Bag
- Traffic advisory system

> CRASHWORTHINESS AND SURVIVABILITY

- Energy-absorbing fuselage and seats
- Crash-resistant fuel cells
- Energy-absorbing skid landing gear
- Duplex hydraulic system
- Dual electric system
- Redundant lubrication for the main transmission



A “maintenance-friendly” helicopter designed to reduce operating costs

Building on Airbus Helicopters’ extensive experience gained with the BK117/EC145 helicopter family, the EC145 T2’s maintenance procedures optimize the intervals between periodical inspections, providing for increased availability and reduced operating costs.

The optional helicopter usage monitoring system (HUMS) keeps track of the engine’s health in accordance with usage conditions, resulting in further availability and enhanced cost-effective maintenance.



Environmentally friendly

Equipped with the Fenestron® shrouded tail rotor – which significantly reduces noise levels – the EC145 T2 is the quietest helicopter in its class.



New standards of comfort

Designed for those who demand the best, the EC145 T2's business aviation configuration unites superior taste and advanced technology for an unparalleled passenger experience.

Passengers board easily via large sliding doors. Once inside the sleek and stylish interior, they can make the most of the uninterrupted view offered.

The exceptionally roomy cabin allows for a variety of seating arrangements while leaving ample space for a substantial volume of luggage, to be easily loaded through the rear clamshell doors.



Characteristics

CABIN & CARGO COMPARTMENT

Floor area	50,77 ft ²	4,72 m ²
Volume	213,15 ft ³	6,04 m ³

ENGINE: 2 TURBOMECA ARRIEL 2E TURBOSHAFT

Take-off power (TOP)	894 shp	907 ch	667 kW
Maximum continuous power (MCP)	771 shp	782 ch	575 kW
One engine inoperative (OEI), 30 sec power	1,072 shp	1,088 ch	800 kW
One engine inoperative (OEI), 2 min power	1,038 shp	1,054 ch	775 kW

Note: Thermodynamic limits per engine at SL, ISA

WEIGHT

Maximum takeoff weight	8,047 lb	3,650 kg
Empty weight, wet (baseline aircraft definition)	4,231 lb	1,919 kg
Useful load (baseline aircraft definition) *	3,816 lb	1,731 kg
Payload and/or fuel	3,640 lb	1,651 kg
Sling load (single hook)	3,307 lb	1,500 kg

SINGLE-ENGINE PERFORMANCE (OEI)

	Max. Gross Weight	
HOGE (OEI 2 min-power), SL, ISA	6,614 lb	3,000 kg
HOGE (OEI 2 min-power), SL, ISA +20°C	6,537 lb	2,965 kg
CAT A, VTOL, SL, ISA	8,047 lb	3,650 kg
CAT A, VTOL, SL, ISA +20°C	8,047 lb	3,650 kg

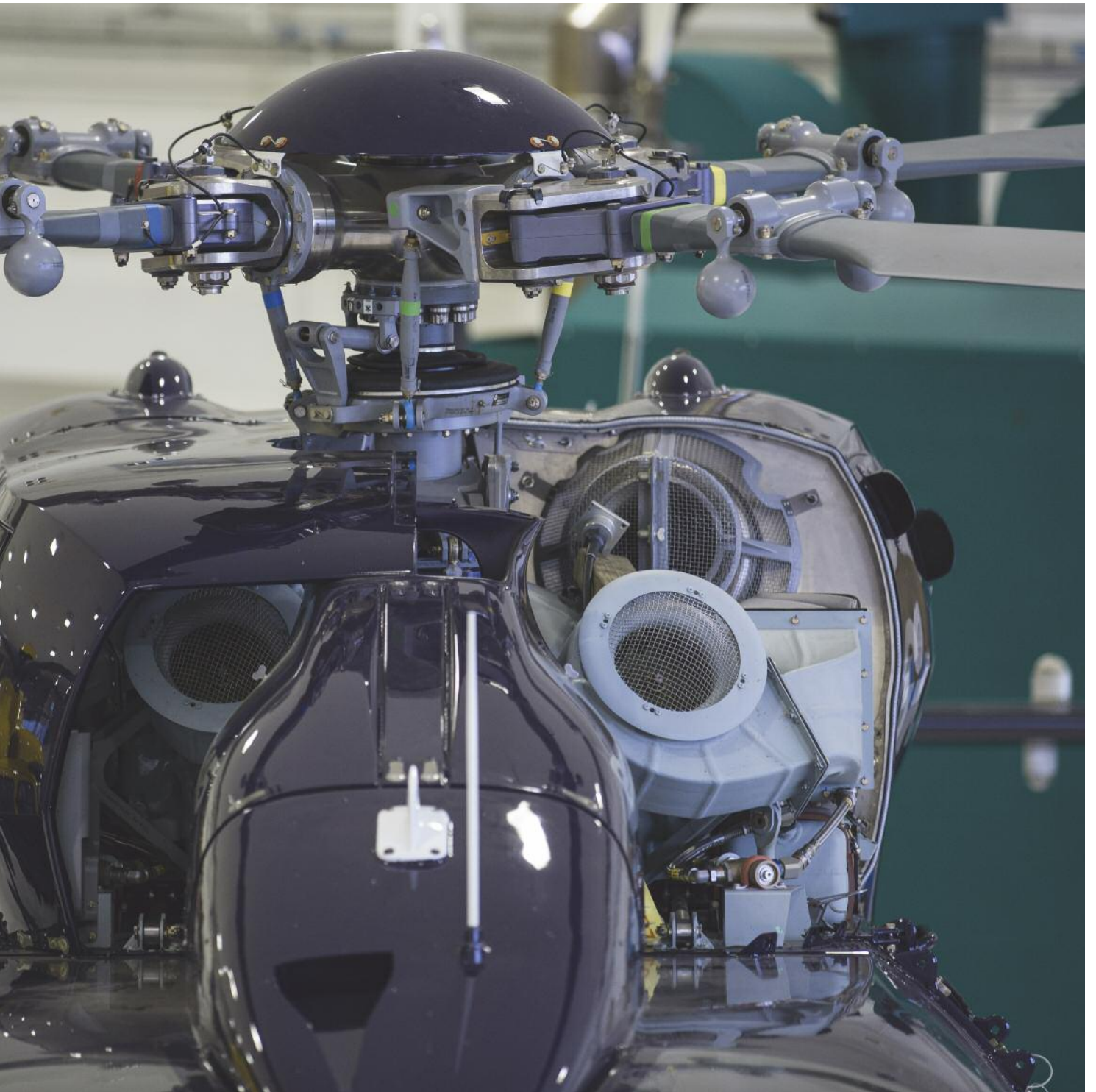
TWO-ENGINE PERFORMANCE (AEO)

Gross weight	8,047 lb	3,650 kg
Maximum speed VNE	145 kts	268 km/h
Recommended cruising speed	132 kts	244 km/h
Hover ceiling IGE (TOP), (4 ft AGL), ISA	12,900 ft	3,932 m
Hover ceiling IGE (TOP), (4 ft AGL), ISA+20	10,300 ft	3,139 m
Hover ceiling OGE (TOP), ISA	9,700 ft	2,957 m
Hover ceiling OGE (TOP), ISA+20	8,050 ft	2,454 m
Range at recommended cruise speed (no reserve) with standard fuel tank	351 NM	650 km
Endurance at 70 KIAS (no reserve) with standard fuel tank	3h33min	

The data provided is being validated. Final confirmation of the data after completion of the flight test program.

* Approximately 30kg more useful load than a comparable EC145 configuration.









Contact

For more information please contact
sales-promotion@eurocopter.com



© AIRBUS HELICOPTERS, Aeroport International
Marseille Provence - 13725 Marignane Cedex -
France - 2014 - 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.

Concept design by MicroMega
Photos by ©Charles Abarr
- ©Olivier Balmain - ©Laurie Gilbert
- ©Airbus Helicopters / Patrick Penna
- ©Airbus Helicopters / Jérôme Deulin.
Printed in France by Hemisud

Printed on PEFC certified paper originating
from sustainable forests.

EC145T2-BR-0314E