

A320: THE MOST SUCCESSFUL AIRCRAFT FAMILY

Offers unbeatable fuel efficiency

The A320 Family is the world's bestselling single-aisle aircraft family and is the preferred choice with traditional airlines and passengers, as well as with the fast-growing low-cost carrier market for which it is now the aircraft of choice. Since entering service in 1988, the A320 has carried more than 13.5 billion passengers and clocked up more than 214 million flight hours and over 117 million flight cycles since entry-into-service. With one aircraft in four sizes (A318, A319, A320 & A321), the A320 Family is comfortably seating from 100 to 240 passengers and allows operators to match the right aircraft size to demand covering the entire market, from low-to-high-density routes to longer-range thin routes.

A320neo Family, the market leader

Capturing around 60% of the market with over 6,100 orders from 100 customers

The **A320neo** (new engine option) is the most advanced A320 version as Airbus continues to invest over 300 million Euros a year in innovation and upgrades for the A320 Family to maintain its position as the most advanced and fuel-efficient single-aisle aircraft Family. The A319neo, A320neo and A321neo models, launched in December 2010, have a choice of two new engines (the PurePower PW1100G-JM from Pratt and Whitney and the LEAP-1A from CFM International) and feature large wingtip devices known as Sharklets. Together they deliver 15% fuel burn reduction per seat right away when the aircraft enters into service, and 20% reduction per seat by 2020 achieved through cabin innovations and efficiency improvements. The A320neo is also more eco-friendly, with 5,000 tonnes less CO₂ emissions per year per aircraft and nearly 50 percent reduction in noise footprint compared to previous generation aircraft.

Airbus aircraft offer airlines higher seat counts without any compromise on passenger comfort, made possible through cabin innovations. These include new generation slim line seats, Airbus' Space-Flex rear lavatory & galley arrangements, Airbus Smart-Lav and Airbus "Cabin-Flex" (ACF) with a new door configuration which together optimises the efficient use of the cabin floor space.

Meanwhile, Sharklets have been available as a forward-fit option since the end of 2012 and today are delivering up to 4% percent reduced fuel burn over longer sectors, corresponding to an annual CO₂ reduction of around 1,000 tonnes per aircraft. In addition, Sharklets are now also available for retrofit to in-service aircraft.

Seating for the A320neo Family using 18-inch seats

In standard two class configuration, the A319neo seats 140, and in high density single class 160.

Standard two class configuration, the A320neo seats 165, and in high density single class 194.

Information

Standard two class configuration, the A321neo seats 206, and in high density single class 240.

A321LR

The longest range single aisle airliner on the market

The A321LR, the latest member of the market leading A320neo Family, is able to fly longer routes of up to 4,000 nm (7,400 km). The A321LR provides additional operational flexibility as it has the longest range of any single aisle airliner, making it ideally suited to transatlantic routes and enabling airlines to tap into new long haul markets which were not previously accessible to single aisle aircraft. In general, the A321LR can carry up to 206 passengers on routes of up to 4,000 nm (7,400 km) in a typical two-class layout, or up to 240 passengers in a single-class configuration on intraregional flights, offering each passenger the possibility to carry up to three bags.

This aircraft is improved with a maximum take-off weight of 97 tonnes compared to 93.5 tonnes for a standard A321neo, with structural reinforcements at the wing and centre wing box, and the option of adding a third fuel tank in the cargo compartment, depending on the needs of the operator. This aircraft is also characterised by its passenger comfort, its significant endurance, its cabin layout adaptability, its per seat operational costs which are 30% lower than those of the nearest competitor, and all this with excellent environmental performance.

The widest single-aisle fuselage on the market

More comfort for passengers and best revenue earning opportunity

With a seven-inch advantage over the B737, the optimised cabin cross-section of the A320 Family sets the standard for passenger cabin adaptability in this segment. It offers unmatched comfort with 18-inch wide seats or an extra-wide aisle for fast turnarounds. Furthermore, the A320 Family cabin delivers the largest overhead stowage volume of any single-aisle airliner. With the pivoting overhead bin option, it will offer ten percent more volume than today's bins and 60 percent more cabin bag stowage. The wider fuselage also provides unmatched cargo capacity and the A319, A320 and A321 are unique in their category in offering a containerised cargo loading system. This system reduces ground equipment and handling costs, and reduces the need for manual loading of individual bags.

Airspace by Airbus now also in the A320 Family

Airspace by Airbus is a new cabin brand highlighting our commitment to both passenger experience and airline performance. The new Airspace Interior for the A320 Family offers the same standards in cabin design as our A350 XWB and A330neo wide-body aircraft. Airspace by Airbus represents the best of Airbus' cabin innovation and design, and promises cabins which are more relaxing, inspiring, convenient and beautiful. These new cabins fully encompass the pillars of the Airspace by Airbus brand: Comfort, Ambience, Services and Design. Tangible advantages in these four domains support operations as

much as they please passengers; a great example being the new "XL" overhead stowage bins for the A320 Family. The design showcased in Airspace interiors is unique. The brand's signature details and iconic elements are consistently recognisable throughout the cabin. The space is designed with straight lines, clean shapes and clear surfaces that add to passengers' enjoyment of the flight. And above all, it is the passengers' space, which for the airlines also becomes a versatile canvas onto which they can project their own brand.

A320 Family members

One aircraft in four sizes for largest market coverage

The original **A320** entered airline service in April 1988 and rapidly established itself as the industry standard for passenger comfort and economy on short to medium-haul sectors. With a range of up to 6,480 km/3,500 nm, the A320 is capable of flying routes ranging from short European commuter sectors, charter operations to coast-to-coast US flights.

The largest member of the A320 Family, the **A321**, entered service in January 1994. With a range of up to 7,400 km/4,000 nm, the A321 is able to fly long-haul routes as for example Europe to U.S east coast.

The **A319** is slightly smaller than the A320 and was first delivered in April 1996. It continues to prove its versatility, enabling carriers to benefit from its range options and seat layout flexibility. It has a range of up to 6,950 km/3,750 nm.

The smallest member of the A320 Family is the A318 which entered service in July 2003. This aircraft has a range of up to 5,750 km/3,100 nm, and typically accommodates 107 passengers in a two-class layout and up to 132 passengers in a single-class layout.

A320 Family commonality concept

Bringing significant savings and flexibility

The A320 Family being fully Fly-By-Wire, benefits from the unique advantages of Airbus operational commonality, in matching the right aircraft to specific route requirements. All A320 Family aircraft share the same "Type Rating", allowing pilots to fly any of the members of the Family after attending only one training course and enabling the same team of mechanics to maintain the aircraft. With only minimal additional training pilots can transition from these to larger long-range aircraft quickly and simply thanks to the unique Airbus family concept and the exceptional degree of operational commonality. The twin-engine A319, A320 and A321 can be powered by either CFM International CFM56 or International Aero Engines V2500 engines (plus CFM LEAP-1A or Pratt and Whitney PW1100G-JM engines for the A320neo Family). All A320 Family members are approved for 180-minute ETOPS operations.

A320: a truly global programme

Worldwide industrial footprint reflecting market success

There are four final assembly lines for the A320 Family: Toulouse, France (A320 assembly); Hamburg, Germany (A318, A319, A320 and A321 assembly); Tianjin, China (A319 and A320 assembly); and Mobile, USA (A319, A320 and A321 assembly).

Tianjin is Airbus' first assembly facility located outside of Europe, resulting from a joint venture involving Airbus with a Chinese consortium comprising the Tianjin Free Trade Zone (TJFTZ) and China Aviation Industry Corporation (AVIC).