

# A300B2/B4 specifications

The A300 is split into variants; the B2 and B4. Each of these is further split into two light and high gross weight sub-variants.

The fuselage size and seat capacity of the A300 changed several times during the aircraft's conception. The A300 was the first Airbus and was built to serve high-density, short- and medium-haul markets. The eventual fuselage design is shared by the two main models: the -B2 and -B4.

The fuselage cross-section became the standard fuselage for all subsequent Airbus widebodies, except for the A380. This standard fuselage allows an eight-abreast seat arrangement in the economy cabin, with 21-inch wide seats in a 2-4-2 arrangement. With all-economy seating in this format and a seat pitch of 32 inches, the aircraft has a maximum seat capacity of 280. Two-class seat capacity is about 270, and tri-class capacity is about 250 seats.

## Specifications

The main difference between the A300B2 and A300B4 is fuel volume and gross structural weight. The A300B2 only uses wing tanks for fuel and has a capacity of 11,620 US Gallons (USG) (*see table, page 11*). This gave the A300B2 a range of up to 1,700nm with a load of 250 passengers (*see table, page 11*).

Early in the A300's development it became clear that this range did not give the aircraft enough flexibility when its seat size was considered. The use of a centre fuel tank in the A300B4 increased volume to 16,380 USG, giving it a range of up to 2,900nm (*see table, page 11*).

The use of higher fuel capacity in the A300B4 is accompanied by higher structural weights that are required by the aircraft to increase its payload-range capability.

There are several sub-variants of the A300B2 and A300B4. The A300B2 has the B2-100 and B2-200, while the A300B4 has the B4-100 and B4-200. These differ in specification weights.

The A300B2 and A300B4 are powered by the Pratt & Whitney JT9D-59A/B and CF6-50C/-50C2. Only four customers, however, selected the JT9D, for a total of 25 aircraft. The remaining 223 A300B2s/B4s built were powered by the CF6-50C/50C2.

Nomenclature of -B2-100, -B2-200, -B4-100 and -B4-200 variants indicates which engine types power the aircraft. All aircraft with a -101, -101A/B and -201 suffix are powered by CF6-50C engines rated at 51,000lbs thrust. Aircraft with a -103 and -203 suffix are powered by CF6-50C2 engines rated at 52,500lbs thrust.

Aircraft with a -120 and -220 suffix are powered by JT9D-59A engines, while aircraft with a -221 suffix are powered by JT9D-59B engines, both of which are rated at 53,000lbs thrust.

Airbus used a 'forward facing crew cockpit' (FFCC) two-man flightdeck late in the A300's development, which automated many of the flight engineer's functions and so dispensed with this role. The FFCC flightdeck retains the A300B2's/B4's analogue flightdeck, however. The FFCC was first used on the A300 in 1981 for B4-200 series aircraft built for Garuda. At the time, this made the A300B2/B4 the largest aircraft to utilise a two-man flightdeck. A total of 15 A300B2/B4s were built with the FFCC. The FFCC was further developed for use in the A310 and A300-600.

## A300B2

The A300B2-100 has a maximum take-off weight (MTOW) of 302,030lbs, giving it a range of 1,450nm with 250 passengers (*see table, page 11*). The aircraft also has a maximum zero fuel weight (MZFW) of 281,090lbs. A typical operating empty weight (OEW) of 189,459lbs gives the aircraft a structural payload of 67,381lbs.

This is utilised to carry the passenger payload plus additional belly freight. The A300B2 and -B4 can accommodate 20 LD-3 containers in the underfloor compartment, which provide 2,920 cubic feet of volume. Once about 55,000lbs has been deducted from the weight of 250 passengers and baggage, the A300B2-100 can accommodate a further 12,000lbs of freight.

A total of 30 A300B2-100s were built, all of which are powered by CF6-50C/-50C2 engines. This included aircraft with manufacturer serial numbers (MSN) from 003, built in 1973, to MSN 132,

built in 1981. Major A300B2-100 customers included Iran Air, Air France, Air Inter, Lufthansa and Indian Airlines.

The A300B2-200 has a higher MTOW of 313,050lbs (*see table, page 11*), and a range of about 1,700nm. The aircraft also has an MZFW of 265,700lbs and OEW of 196,400lbs, allowing a gross structural payload of 69,300lbs. This allows up to 14,000lbs of belly freight to be carried over a full passenger payload.

A total of nine A300B2-200s were built between 1977 and 1982, all equipped with CF6-50C2 engines, eight of which were ordered by Iran Air.

A group of late production B2-200s utilised the FFCC. Three A300B2-203FFs were built for VASP of Brazil.

In addition to the basic A300B2-100 and -200 models, Airbus also developed a special high performance variant with Kruger flaps that improved the aircraft's field performance for operations from hot and high airfields. The Kruger flaps gave the aircraft the -B2K designation in its nomenclature.

The B2K-100 has the same weight specifications as the -B2-100, while the -B2K-200 has the same weight specifications as the -B2-200.

Eight -B2K-100s were built for TOA Domestic Airlines of Japan, and five -B2K-200s for South African Airways and TOA Domestic. All 13 aircraft were powered by CF6-50C2R engines and delivered between 1976 and 1983.

## A300B4

As described, the A300B4 utilises a centre wing fuel tank, giving it a total fuel volume of 16,380 USG and extending its range over the A300B2.

The lower gross weight A300B4-100 has an MTOW of 347,220lbs and range of 2,550nm (*see table, page 11*). There are three sub-types of the A300B4-100: the -101 powered by the CF6-50C; the -B4-103 powered by the CF6-50C2; and the -B4-120 powered by the JT9D-59A.

The -B4-100 has an MZFW of 273,400lbs and OEW of 199,900lbs, giving it a maximum structural payload of 73,500lbs. This allows the aircraft to carry up to 18,000lbs freight in addition to a full complement of passengers.

A total of 51 A300B4-100s were delivered, from 1975 to 1982. Production of the longer range B4-100/-200 series aircraft started just two years after the first B2-100s were delivered.

The first main group of B4-100s comprised 41 aircraft powered by CF6-50C2 engines. Major customers were Korean Air, Eastern Airlines, Thai and Olympic Airways.

The second group of A300B4-100s consisted of 10 aircraft equipped with JT9D-59A engines built for SAS and

Iberia.

The -B4-200 is a higher gross weight aircraft, with an MTOW of 363,760lbs and range of 2,900nm (*see table, this page*). This range was almost twice that of the original A300B2-100, and the A300B4-200's capability made it the most popular A300B2/B4 model.

A total of 137 A300B4-200s were built between 1974 and 1984. There were four main sub-types.

Two sub-types were powered by CF6-50C2 engines. The first of these comprised 119 A300B4-200s, including one A300C4 with a deactivated door. Main customers were Air France, Olympic Airways, Lufthansa, Malaysian Airlines System, Pakistan International Airlines, Alitalia, Singapore Airlines, Thai, Eastern Airlines, Air India, Egyptair, Pan Am and Air Afrique.

The second group was three A300B4-200FFs built for Finnair and Tunis Air.

The two remaining sub-types were powered by JT9D-59A engines. The first group was six A300B4-220s built for China Airlines between 1982 and 1983, and the second was nine A300B4-220FFs built for Garuda.

The A300B4-200 has an MZFW of 277,800lbs and OEW of 200,700lbs, which give the aircraft a structural payload of 77,100lbs (*see table, this page*). After accounting for a full passenger payload, the aircraft can accommodate a payload of about 22,000lbs belly freight.

### A300C4/F4

Only six aircraft were built with a side freight door. These were manufactured to A300B4-200 standards. All six aircraft are equipped with CF6-50C2 engines. Three A300C4-200s were built for Hapag-Lloyd, South African Airways and TOA Domestic Airlines. The last aircraft later had its freight door deactivated and became an A300B4-203. A fourth A300B4-203 was built for Thai and later converted to an A300C4-203. Another two aircraft were originally built as A300C4s, but these were later converted to A300F4-203s for Korean Air.

The A300C4-200 was a convertible aircraft, and could therefore be operated in either passenger or freighter modes. Switching from passenger to freighter mode would require removal of most of the interior furnishings associated with passenger facilities.

In freighter mode, the A300C4/F4-200 has a maximum payload of 88,184lbs and several freight configuration options available for freight carriage.

One option is for nine 96-inch X 125-inch containers plus five 88-inch X 125-inch containers in a single row. This

### A300B2-100 SERIES GROSS WEIGHT & ENGINE CONFIGURATIONS

| Variant                | A300B2-101 | A300B2-103 | A300B2K-103 |
|------------------------|------------|------------|-------------|
| MTOW lbs               | 302,030    | 302,030    | 302,030     |
| Structural payload lbs | 67,381     | 67,381     | 67,381      |
| Fuel volume USG        | 11,620     | 11,620     | 11,620      |
| Tri-class seats        | 250        | 250        | 250         |
| Range nm               | 1,450      | 1,450      | 1,450       |
| Belly freight capacity | 20 LD-3    | 20 LD-3    | 20 LD-3     |
| Engine options         | CF6-50C    | CF6-50C2   | CF6-50C2R   |
| Engine thrust          | 51,000     | 52,500     | 52,500      |
| Number built           | 10         | 20         | 8           |

### A300B2-200 SERIES GROSS WEIGHT & ENGINE CONFIGURATIONS

| Variant                | A300B2-203 | A300B2-203FF | A300B2K-203 |
|------------------------|------------|--------------|-------------|
| MTOW lbs               | 313,050    | 313,050      | 313,050     |
| Structural payload     | 69,300     | 69,300       | 69,300      |
| Fuel volume USG        | 11,620     | 11,620       | 11,620      |
| Tri-class seats        | 250        | 250          | 250         |
| Range nm               | 1,700      | 1,700        | 1,700       |
| Belly freight capacity | 20 LD-3    | 20 LD-3      | 20 LD-3     |
| Engine options         | CF6-50C2   | CF6-50C2     | CF6-50C2R   |
| Engine thrust          | 52,500     | 52,500       | 52,500      |
| Number built           | 9          | 3            | 5           |

### A300B4-100/-200 SERIES GROSS WEIGHT & ENGINE CONFIGURATIONS

| Variant                | A300B4-103 | A300B4-120 | A300B4-203/<br>-203FF | A300B4-220/<br>-220FF |
|------------------------|------------|------------|-----------------------|-----------------------|
| MTOW lbs               | 347,220    | 347,220    | 363,760               | 363,760               |
| Structural payload     | 73,500     | 73,500     | 77,100                | 77,100                |
| Fuel volume USG        | 16,380     | 16,380     | 16,380                | 16,380                |
| Tri-class seats        | 250        | 250        | 250                   | 250                   |
| Range nm               | 2,550      | 2,550      | 2,900                 | 2,900                 |
| Belly freight capacity | 20 LD-3    | 20 LD-3    | 20 LD-3               | 20 LD-3               |
| Engine options         | CF6-50C2   | JT9D-59A   | CF6-50C2              | JT9D-59A              |
| Engine thrust          | 52,500     | 53,000     | 52,500                | 53,000                |
| Number built           | 41         | 10         | 119/<br>3             | 6/<br>9               |

### A300C4/F4-200 SERIES GROSS WEIGHT & ENGINE CONFIGURATIONS

| Variant            | A300C4-203<br>Passenger mode | A300C4-203<br>Freighter mode | A300F4-203               |
|--------------------|------------------------------|------------------------------|--------------------------|
| MTOW lbs           | 363,760                      | 363,760                      | 363,760                  |
| Structural payload | 78,264                       | 88,184                       | 93,120                   |
| Fuel volume USG    | 16,380                       | 16,380                       | 16,380                   |
| Tri-class seats    | 250                          | N/A                          | N/A                      |
| Freight volume     | 2,920                        | 11,280/11,292/<br>11,586     | 11,280/11,292/<br>11,586 |
| Number built       |                              | 3                            | 2                        |

provides 8,666 cubic feet of containerised volume. When added to the 2,920 cubic feet provided by the 20 LD-3 belly containers, the total volume available is 11,586 cubic feet.

A second option is for 20 88-inch X 108-inch containers in two rows, and a

third is for 18 88-inch X 125-inch containers in two rows (*see table, this page*), which provide 8,372 cubic feet and 8,360 cubic feet of freight volume. Belly volume takes the total for these two configurations to 11,292 and 11,280 cubic feet. [AC](#)