



GENERAL INFORMATION & STRUCTURES

Revision 9: 29 December 2023 Reviewed: 29 December 2023



SA FAMILY PRESENTATION

AIRCRAFT GENERAL

The Single Aisle is the most advanced family aircraft in service today, with fly-by-wire flight controls.

The A318, A319, A320 and A321 are twin-engine subsonic medium range aircraft.

The family offers a choice of engines:

International Aero Engines and CFM International for the A319, A320 and A321.

Pratt & Whitney and CFM International for the A318.

The NEO SA family (except the A318) offers a choice of engines:

Pratt & Whitney PW 1100G engines,

CFM LEAP-1A engines.

AIRCRAFT DIMENSIONS

The picture shows the main dimensions for the A320.

The A318, A319 and A321 have exactly the same dimensions except that:

the A318 is 6.12 m (20ft) shorter, the A319 is 3.74 m (12ft 3in) shorter, the A321 is 6.93 m (22ft 9in) longer.

SHARKLET PURPOSE

The sharklets are specially designed for a better eco-efficiency and payload-range performance of the A320 family:

Less fuel burn,

Less CO2,

Revenue payload increased,

Higher range with the original payload,

Higher available take-off weight,

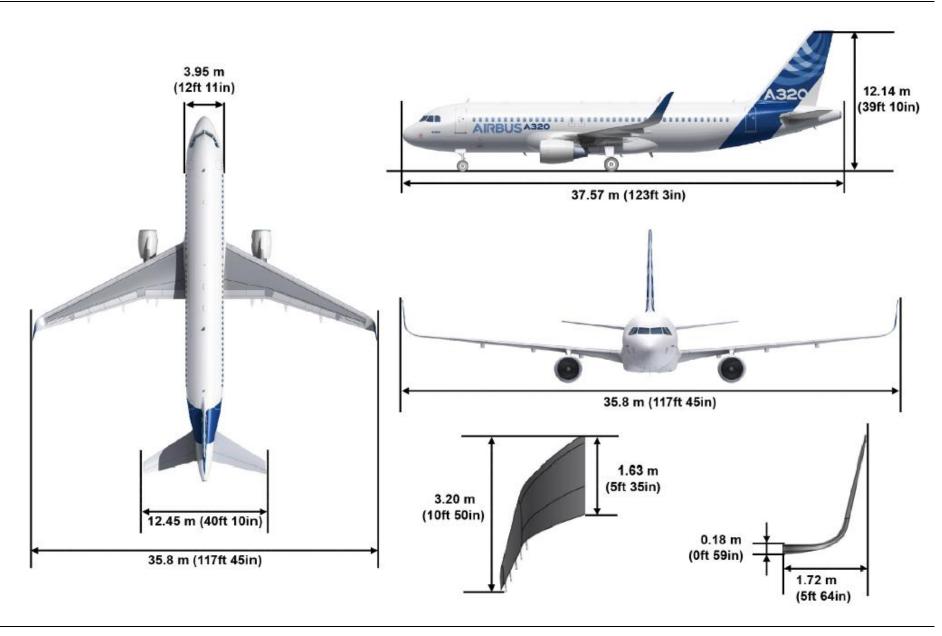
Lower average take-off thrust (with large savings in engine maintenance costs),

Lower take-off noise,

Better climb performance,

Higher initial cruise altitude.





FOR TRAINING USE ONLY



FAMILY RANGE

The A320 family has a range from 3000 to 4000 Nm.





A320 Family range in Nm:

AIRCRAFT	CEO Winglets	CEO Sharklets	NEO N/A 4200	
A318	3100	N/A		
A319	3600	3700		
A320	3200	3300	3700	
A321	3000	3100	3700	

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MAXIMUM WEIGHTS AND OPERATING LIMITS

The following picture shows maximum weights and operating limits for the Single Aisle family aircraft.

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MODEL	ENGINE		MAXIMUM WEIGHTS (kg)			OPERATING LIMITS	
	MANUFACTURER	TYPE	Max Take-Off Weight (MTOW)	Max Landing Weight (MLW)	Max Zero Fuel Weight (MZFW)	Match Max Operating Speed (MMO)	Maximum Operating Speed (VMO
A318-100	СҒМІ	CFM56-5-B	FROM 59000 TO 68000	FROM 56000 TO 575000	FROM 53000 TO 54500	0.82	350 kt
	PW	PW 6122					
A319-100	СҒМІ	CFM 56-5A CFM 56-B	FROM 64000 TO 75500	FROM 61000 TO 62500	FROM 57000 TO 58500		
	IAE	IAE V2522 IAE V2524 IAE V2527					
A320-100	CFMI	CFM56-5A	68000	63000	59000		
A320-200	CFMI	CFM 56-5A CFM 56-5B	FROM 73500 TO 78000	FROM 64500 TO 66000	FROM 61000 TO 62500		
	IAE	IAE V2527 IAE V2500					
A320 NEO	PW	PW1127G-JM	FROM 73500 TO 79000	FROM 66300 TO 67400	FROM 62800 TO 64300		
	CFM	LEAP-1A					
A321-100	CFMI	CFM56-5B	FROM 89000 TO 93500	FROM 73500 TO 75000	FROM 69500 TO 71000		
	IAE	IAE V2530					
A321-200	CFMI	CFM56-5B	FROM 89000 TO 93000	FROM 75500 TO 77800	FROM 71500 TO 73800		
	IAE	IAE V2533 IAE V2530					



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