

747-400 performance summary

747

General Electric engines

		Basic	Maximum ²
Passengers Cargo	(FC/BC/EC) pallets/containers ¹	416 (23/78/315) 5/14	
Engines SL standard-day takeoff thrust/flat-rated temperature (BET)	lb/°F	CF6-80C2B1F 56,500/90	CF6-80C2B5F 62,100/86
Maximum taxi weight	kg (lb)	364,230 (803,000)	398,250 (878,000)
Maximum takeoff weight	kg (lb)	362,870 (800,000)	396,890 (875,000)
Maximum landing weight	kg (lb)	260,360 (574,000)	295,740 (652,000)
Maximum zero fuel weight	kg (lb)	242,670 (535,000)	251,740 (555,000)
Operating empty weight ³	kg (lb)	182,480 (402,300)	182,840 (403,100)
Fuel capacity	L (U.S. gal)	203,520 (53,765)	216,010 (57,065)
Design range (MTOW, full passenger payload)	nmi (km)	6,080 (11,260)	7,225 ⁴ (13,380) ⁴
Cruise Mach		0.855	0.855
Takeoff field length (SL, 86°F, MTOW)	m (ft)	2,815 (9,250)	3,015 (9,900)
Initial cruise altitude (MTOW, ISA + 10°C)	ft	34,700	32,700
Landing field length (MLW)	m (ft)	1,905 (6,250)	2,175 (7,150)
Approach speed (MLW)	kias	146	157
Fuel burn/seat 6,000 nmi	kg (lb)	298.2 (657.4)	298.6 (658.4)

- Typical mission rules.
- Three-class seating.

¹96- x 125-in pallets/LD-1 containers.

²Highest optional weight, loading restrictions apply.

³Includes overhead crew rest, door 5—does not include IFE.

⁴Fuel volume limited.

747-400 performance summary

747

Pratt & Whitney engines

		Basic	Maximum ²
Passengers Cargo	(FC/BC/EC) pallets/containers ¹	416 (23/78/315) 5/14	
Engines SL standard-day takeoff thrust/flat-rated temperature (BET)	lb/°F	PW4056 57,100/92	PW4062 63,300/86
Maximum taxi weight	kg (lb)	364,230 (803,000)	398,250 (878,000)
Maximum takeoff weight	kg (lb)	362,870 (800,000)	396,890 (875,000)
Maximum landing weight	kg (lb)	260,360 (574,000)	295,740 (652,000)
Maximum zero fuel weight	kg (lb)	242,670 (535,000)	251,740 (555,000)
Operating empty weight ³	kg (lb)	183,160 (403,800)	183,520 (404,600)
Fuel capacity	L (U.S. gal)	204,350 (53,985)	216,840 (57,285)
Design range (MTOW, full passenger payload)	nmi (km)	6,075 (11,250)	7,285 ⁴ (13,490) ⁴
Cruise Mach		0.855	0.855
Takeoff field length (SL, 86°F, MTOW)	m (ft)	2,815 (9,250)	2,955 (9,700)
Initial cruise altitude (MTOW, ISA + 10°C)	ft	34,700	32,800
Landing field length (MLW)	m (ft)	1,905 (6,250)	2,175 (7,150)
Approach speed (MLW)	kias	146	157
Fuel burn/seat 6,000 nmi	kg (lb)	296.7 (654.1)	297.1 (655.1)

- Typical mission rules.
- Three-class seating.

¹96- x 125-in pallets/LD-1 containers.

²Highest optional weight, loading restrictions apply.

³Includes overhead crew rest, door 5—does not include IFE.

⁴Fuel volume limited.

747-400 performance summary

747

Rolls-Royce engines

		Basic	Maximum ²
Passengers Cargo	(FC/BC/EC) pallets/containers ¹	416 (23/78/315) 5/14	
Engines SL standard-day takeoff thrust/flat-rated temperature (BET)	lb/°F	RB211-524G2-T 56,400/86	RB211-524H2-T 59,500/86
Maximum taxi weight	kg (lb)	364,230 (803,000)	398,250 (878,000)
Maximum takeoff weight	kg (lb)	362,870 (800,000)	396,890 (875,000)
Maximum landing weight	kg (lb)	260,360 (574,000)	295,740 (652,000)
Maximum zero fuel weight	kg (lb)	242,670 (535,000)	251,740 (555,000)
Operating empty weight ³	kg (lb)	183,290 (404,100)	183,650 (404,900)
Fuel capacity	L (U.S. gal)	204,350 (53,985)	216,840 (57,285)
Design range (MTOW, full passenger payload)	nmi (km)	5,960 (11,030)	7,155 ⁴ (13,250) ⁴
Cruise Mach		0.855	0.855
Takeoff field length (SL, 86°F, MTOW)	m (ft)	2,830 (9,300)	3,200 (10,500)
Initial cruise altitude (MTOW, ISA + 10°C)	ft	34,700	32,800
Landing field length (MLW)	m (ft)	1,905 (6,250)	2,175 (7,150)
Approach speed (MLW)	kias	146	157
Fuel burn/seat 6,000 nmi	kg (lb)	Not applicable	303.0 (667.9)

- Typical mission rules.
- Three-class seating.

¹96- x 125-in pallets/LD-1 containers.

²Highest optional weight, loading restrictions apply.

³Includes overhead crew rest, door 5—does not include IFE.

⁴Fuel volume limited.

747-400ER performance summary

747

General Electric engines

		Basic fuel capacity ² (1 body tank)	Maximum fuel capacity ² (2 body tanks)
Passengers	(FC/BC/EC)	416 (23/78/315)	
Cargo	pallets/containers¹	4/14	3/14
Engines		CF6-80C2B5F	CF6-80C2B5F
SL standard-day takeoff thrust/flat-rated temperature (BET)	lb/°F	62,100/86	62,100/86
Maximum taxi weight	kg (lb)	414,130 (913,000)	414,130 (913,000)
Maximum takeoff weight	kg (lb)	412,760 (910,000)	412,760 (910,000)
Maximum landing weight	kg (lb)	263,530 (581,000)	295,740 (652,000)
Maximum zero fuel weight	kg (lb)	245,840 (542,000)	251,740 (555,000)
Operating empty weight³	kg (lb)	185,610 (409,200)	186,330 (410,800)
Fuel capacity	L (U.S. gal)	228,160 (60,275)	240,310 (63,485)
Design range (MTOW, full passenger payload)	nmi (km)	7,495⁴ (13,880)⁴	7,565 (14,010)
Cruise Mach		0.855	0.855
Takeoff field length (SL, 86°F, MTOW)	m (ft)	3,320 (10,900)	3,320 (10,900)
Initial cruise altitude (MTOW, ISA + 10°C)	ft	31,900	32,800
Landing field length (MLW)	m (ft)	1,935 (6,350)	2,175 (7,150)
Approach speed (MLW)	kias	147	157
Fuel burn/seat			
6,000 nmi	kg (lb)	304.5 (671.4)	305.4 (673.4)

- Typical mission rules.
- Three-class seating.

¹96- x 125-in pallets/LD-1 containers.

²Highest weight, loading restrictions apply.

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⁴Fuel volume limited.

747-400ER performance summary

747

Pratt & Whitney engines

		Basic fuel capacity ² (1 body tank)	Maximum fuel capacity ² (2 body tanks)
Passengers	(FC/BC/EC)	416 (23/78/315)	
Cargo	pallets/containers¹	4/14	3/14
Engines		PW4062	PW4062
SL standard-day takeoff thrust/flat-rated temperature (BET)	lb/°F	63,300/86	63,300/86
Maximum taxi weight	kg (lb)	414,130 (913,000)	414,130 (913,000)
Maximum takeoff weight	kg (lb)	412,760 (910,000)	412,760 (910,000)
Maximum landing weight	kg (lb)	263,530 (581,000)	295,740 (652,000)
Maximum zero fuel weight	kg (lb)	245,840 (542,000)	251,740 (555,000)
Operating empty weight³	kg (lb)	186,290 (410,700)	187,010 (412,300)
Fuel capacity	L (U.S. gal)	228,990 (60,495)	241,140 (63,705)
Design range (MTOW, full passenger payload)	nmi (km)	7,560⁴ (14,000)⁴	7,585 (14,045)
Cruise Mach		0.855	0.855
Takeoff field length (SL, 86°F, MTOW)	m (ft)	3,260 (10,700)	3,260 (10,700)
Initial cruise altitude (MTOW, ISA + 10°C)	ft	32,000	32,000
Landing field length (MLW)	m (ft)	1,935 (6,350)	2,175 (7,150)
Approach speed (MLW)	kias	147	157
Fuel burn/seat			
6,000 nmi	kg (lb)	303.0 (668.0)	303.9 (669.9)

- Typical mission rules.
- Three-class seating.

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