

747-400 Freighter

Performance summary

StartupBoeing

General Electric engines

		Basic	Option ²	Option ³
Cargo	MD pallets/LD pallets/LD containers ¹	30/9/2		
Engines		CF6-80C2-B1F	CF6-80C2-B5F	CF6-80C2-B1F
SL standard-day takeoff thrust/flat-rated temperature	lb/°F	56,500/90	62,100/86	56,500/90
Maximum taxi weight	kg (lb)	364,230 (803,000)	398,250 (878,000)	369,220 (814,000)
Maximum takeoff weight	kg (lb)	362,870 (800,000)	396,890 (875,000)	367,860 (811,000)
Maximum landing weight	kg (lb)	295,740 (652,000)	295,740 (652,000)	302,090 (666,000)
Maximum zero fuel weight	kg (lb)	276,690 (610,000)	276,690 (610,000)	288,030 (635,000)
Operating empty weight ⁴	kg (lb)	163,700 (360,900)	163,700 (360,900)	163,700 (360,900)
Tare weight	kg (lb)	5,450 (12,010)	5,450 (12,010)	5,450 (12,010)
Fuel capacity	L (U.S. gal)	203,520 (53,765)	203,520 (53,765)	203,520 (53,765)
Maximum revenue payload	kg (lb)	112,990 (249,100)	112,990 (249,100)	124,330 (274,100)
Design range (at max. revenue payload)	nmi (km)	3,190 (5,910)	4,455 (8,250)	2,825 (5,230)
Cruise Mach		0.845	0.845	0.845
Takeoff field length (SL, 86°F, MTOW)	m (ft)	2,820 (9,250)	3,110 (10,200)	2,910 (9,550)
Initial cruise altitude (MTOW, ISA + 10°C)	ft	34,600	32,700	34,300
Landing field length (MLW)	m (ft)	2,195 (7,200)	2,195 (7,200)	2,225 (7,300)
Approach speed (MLW)	kias	157	157	158
Block fuel data				
3,000 nmi	kg (lb)	68,200 (150,360)	68,200 (150,360)	Not applicable ⁵

- Typical mission rules.

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

²Highest available MTOW, only available with 276,690-kg (610,000-lb) MZFW.

³Highest available MZFW, only available with 367,860-kg (811,000-lb) MTOW. Operating restrictions require linear reduction in MTOW with MZFW increase from 276,690 to 288,030-kg (610,000 to 635,000 lb).

⁴Includes tare weight.

⁵Maximum landing weight limited.

747-400 Freighter

Performance summary

StartupBoeing

Pratt & Whitney engines

		Basic	Option ²	Option ³
Cargo	MD pallets/LD pallets/LD containers ¹	30/9/2		
Engines		PW4056	PW4062	PW4056
SL standard-day takeoff thrust/flat-rated temperature	lb/°F	57,100/92	63,300/86	57,100/92
Maximum taxi weight	kg (lb)	364,230 (803,000)	398,250 (878,000)	369,220 (814,000)
Maximum takeoff weight	kg (lb)	362,870 (800,000)	396,890 (875,000)	367,870 (811,000)
Maximum landing weight	kg (lb)	295,740 (652,000)	295,740 (652,000)	302,100 (666,000)
Maximum zero fuel weight	kg (lb)	276,690 (610,000)	276,690 (610,000)	288,030 (635,000)
Operating empty weight ⁴	kg (lb)	164,380 (362,400)	164,380 (362,400)	164,380 (362,400)
Tare weight	kg (lb)	5,450 (12,010)	5,450 (12,010)	5,450 (12,010)
Fuel capacity	L (U.S. gal)	204,350 (53,985)	204,350 (53,985)	204,350 (53,985)
Maximum revenue payload	kg (lb)	112,310 (247,600)	112,310 (247,600)	123,650 (272,600)
Design range (at max. revenue payload)	nmi (km)	3,170 (5,870)	4,450 (8,240)	2,430 (4,500) ⁵
Cruise Mach		0.845	0.845	0.845
Takeoff field length (SL, 86°F, MTOW)	m (ft)	2,820 (9,250)	2,985 (9,800)	2,910 (9,550)
Initial cruise altitude (MTOW, ISA + 10°C)	ft	34,600	32,700	34,300
Landing field length (MLW)	m (ft)	2,165 (7,100)	2,165 (7,100)	2,225 (7,300)
Approach speed (MLW)	kias	157	157	158
Block fuel data				
3,000 nmi	kg (lb)	68,280 (150,530)	68,280 (150,530)	Not applicable ⁵

- Typical mission rules.

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

²Highest available MTOW, only available with 276,690-kg (610,000-lb) MZFW.

³Highest available MZFW, only available with 367,860-kg (811,000-lb) MTOW. Operating restrictions require linear reduction in MTOW with MZFW increase from 276,690 to 288,030-kg (610,000 to 635,000 lb).

⁴Includes tare weight.

⁵Maximum landing weight limited.

747-400 Freighter

Performance summary

StartupBoeing

Rolls-Royce engines

		Basic	Option ²	Option ³
Cargo	MD pallets/LD pallets/LD containers ¹	30/9/2		
Engines		RB211-524G-T	RB211-524H-T	RB211-524G-T
SL standard-day takeoff thrust/flat-rated temperature	lb/°F	56,400/86	59,500/86	56,400/86
Maximum taxi weight	kg (lb)	304,230 (803,000)	398,250 (878,000)	369,220 (814,000)
Maximum takeoff weight	kg (lb)	302,870 (800,000)	396,890 (875,000)	367,860 (811,000)
Maximum landing weight	kg (lb)	295,740 (652,000)	295,740 (652,000)	302,090 (666,000)
Maximum zero fuel weight	kg (lb)	276,690 (610,000)	276,690 (610,000)	288,030 (635,000)
Operating empty weight ⁴	kg (lb)	164,520 (362,700)	164,520 (362,700)	164,520 (362,700)
Tare weight	kg (lb)	5,450 (12,010)	5,450 (12,010)	5,450 (12,010)
Fuel capacity	L (U.S. gal)	204,350 (53,985)	204,350 (53,985)	204,350 (53,985)
Maximum revenue payload	kg (lb)	112,170 (247,300)	112,170 (247,300)	123,510 (272,300)
Design range (at max. revenue payload)	nmi (km)	3,110 (5,760)	4,365 (8,080)	2,305 (4,270) ⁵
Cruise Mach		0.845	0.845	0.845
Takeoff field length (SL, 86°F, MTOW)	m (ft)	2,850 (9,350)	3,290 (10,800)	2,920 (9,600)
Initial cruise altitude (MTOW, ISA + 10°C)	ft	34,600	32,700	34,300
Landing field length (MLW)	m (ft)	2,165 (7,100)	2,165 (7,100)	2,225 (7,300)
Approach speed (MLW)	kias	157	157	158
Block fuel data				
3,000 nmi	kg (lb)	69,540 (153,320)	69,540 (153,320)	Not applicable ⁵

- Typical mission rules.

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

²Highest available MTOW, only available with 276,690-kg (610,000-lb) MZFW.

³Highest available MZFW, only available with 367,860-kg (811,000-lb) MTOW. Operating restrictions require linear reduction in MTOW with MZFW increase from 276,690 to 288,030-kg (610,000 to 635,000 lb).

⁴Includes tare weight.

⁵Maximum landing weight limited.

747-400ER Freighter

Performance summary

StartupBoeing

General Electric engines

		Basic	Option ²
Cargo	MD pallets/LD pallets/LD containers ¹	30/9/2	
Engines		CF6-80C2-B5F	CF6-80C2-B5F
SL standard-day takeoff thrust/flat-rated temperature	lb/°F	62,100/86	62,100/86
Maximum taxi weight	kg (lb)	414,130 (913,000)	369,220 (814,000)
Maximum takeoff weight	kg (lb)	412,770 (910,000)	367,860 (811,000)
Maximum landing weight	kg (lb)	296,200 (653,000)	302,090 (666,000)
Maximum zero fuel weight	kg (lb)	277,140 (611,000)	288,030 (635,000)
Operating empty weight ³	kg (lb)	164,020 (361,600)	164,020 (361,600)
Tare weight	kg (lb)	5,450 (12,010)	5,450 (12,010)
Fuel capacity	L (U.S. gal)	203,520 (53,765)	203,520 (53,765)
Maximum revenue payload	kg (lb)	113,130 (249,400)	124,010 (273,400)
Design range (at max. revenue payload)	nmi (km)	4,980 (9,220)	2,825 ⁴ (5,230) ⁴
Cruise Mach		0.845	0.845
Takeoff field length (SL, 86°F, MTOW)	m (ft)	3,340 (10,950)	2,560 (8,400)
Initial cruise altitude (MTOW, ISA + 10°C)	ft	31,800	34,300
Landing field length (MLW)	m (ft)	2,180 (7,150)	2,255 (7,400)
Approach speed (MLW)	kias	157	158
Block fuel data			
3,000 nmi	kg (lb)	68,310 (150,590)	Not applicable ⁴

- Typical mission rules.

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

²Highest available MZFW, only available with 367,860-kg (811,000-lb) MTOW. Operating restrictions require linear reduction in MTOW with MZFW increase from 276,690 to 288,030-kg (610,000 to 635,000 lb).

³Includes tare weight.

⁴Maximum landing weight limited.

747-400ER Freighter

Performance summary

StartupBoeing

Pratt & Whitney engines

		Basic	Option ²
Cargo	MD pallets/LD pallets/LD containers ¹	30/9/2	
Engines		PW4062	PW4062
SL standard-day takeoff thrust/flat-rated temperature	lb/°F	63,300/86	63,300/86
Maximum taxi weight	kg (lb)	414,130 (913,000)	369,220 (814,000)
Maximum takeoff weight	kg (lb)	412,770 (910,000)	367,860 (811,000)
Maximum landing weight	kg (lb)	296,200 (653,000)	302,090 (666,000)
Maximum zero fuel weight	kg (lb)	277,140 (611,000)	288,030 (635,000)
Operating empty weight ³	kg (lb)	164,700 (363,100)	164,700 (363,100)
Tare weight	kg (lb)	5,450 (12,010)	5,450 (12,010)
Fuel capacity	L (U.S. gal)	204,350 (53,985)	204,350 (53,985)
Maximum revenue payload	kg (lb)	112,450 (247,900)	123,330 (271,900)
Design range (at max. revenue payload)	nmi (km)	4,985 (9,230)	2,430 ⁴ (4,500) ⁴
Cruise Mach		0.845	0.845
Takeoff field length (SL, 86°F, MTOW)	m (ft)	3,290 (10,800)	2,540 (8,350)
Initial cruise altitude (MTOW, ISA + 10°C)	ft	31,900	34,300
Landing field length (MLW)	m (ft)	2,195 (7,200)	2,255 (7,400)
Approach speed (MLW)	kias	157	158
Block fuel data			
3,000 nmi	kg (lb)	68,380 (150,750)	Not applicable ⁴

- Typical mission rules.

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

²Highest available MZFW, only available with 367,860-kg (811,000-lb) MTOW. Operating restrictions require linear reduction in MTOW with MZFW increase from 276,690 to 288,030-kg (610,000 to 635,000 lb).

³Includes tare weight.

⁴Maximum landing weight limited.