

CHEYENNE 400LS

SPECIFICATIONS & PERFORMANCE

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POWER PLANTS

Two Garrett Turbine Engine Company TPE 331-14
 clockwise & counterclockwise rotation, 1540 RPM
 Thermodynamic Capability 1645 hp each
 Gearbox Limit 1250 hp each
 Flat Rated at 1000 hp each
 Two Dowty-Rotol 106" diameter 4 blade props,
 advanced carbon-epoxy composite blade structure
 advanced technology airfoil section ARA-D

WEIGHTS

Maximum ramp weight 12,135 lbs. (5503 kg)
 Maximum take-off weight 12,050 lbs. (5466 kg)
 Maximum landing weight 11,100 lbs. (5035 kg)
 Standard empty weight-equipped* 7565 lbs. (3431 kg)
 (includes: unusable fuel, full operating fluids
 and full oil)
 Standard useful load 4570 lbs. (2073 kg)
 Maximum zero fuel weight 10,000 lbs. (4536 kg)
 Maximum cabin load (equipped) 2435 lbs. (1105 kg)
 Maximum usable fuel 3819 lbs. (1732 kg)

*Includes standard Collins avionics

WING AREA/WING LOADING/POWER LOADING

Wing area 293 ft.² (27.2 m²)
 Wing loading 41.1 lbs/ft.² (200.8 kg/m²)
 Power loading 6.02 lbs/hp (2.73 kg/hp)

PRESSURIZATION (7.6 PSI Differential)

Actual aircraft altitude Cabin Altitude
 18,500 ft. (5639 m) Sea Level
 35,000 ft. (10668 m) 8000 ft. (2438 m)
 41,000 ft. (12497 m) 10,000 ft. (3048 m)

USABLE FUEL (6.7 lbs./gal.)

570 U.S. gal. (2158 L)

DIMENSIONS

Wing span 47.7 ft. (14.53 m)
 Length 43.4 ft. (13.23 m)
 Height 17.0 ft. (5.18 m)
 Cabin length 275 in. (699 cm)
 Cabin width 51 in. (130 cm)
 Cabin height 56 in. (142 cm)
 Passenger door size 28 x 45 in. (71.2 x 114.3 cm)
 Nose baggage door size (forward) 24 x 12 in. (61.0 x 30.5 cm)
 Nose baggage door size (aft) 26 x 20 in. (66.0 x 50.8 cm)
 Utility door size (aft) 18 x 30 in. (45.7 x 76.2 cm)

BAGGAGE – WEIGHT ALLOWANCE/VOLUME

Rear baggage compartment 300 lbs./31 ft.³ (136 kg/.88 m³)
 Front baggage compartment 300 lbs./17 ft.³ (136 kg/.48 m³)

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PERFORMANCE STANDARD ATMOSPHERE CONDITIONS

CRUISE SPEEDS – TAS

Mid-Cruise weight (10,000 lbs)
(Maximum cruise power)
24,000 ft (7315 m) 351 kts (650 kph)
25,000 ft (7620 m) 350 kts (648 kph)
29,000 ft (8839 m) 346 kts (641 kph)
35,000 ft (10668 m) 334 kts (619 kph)
41,000 ft (12497 m) 294 kts (545 kph)

CRUISE RANGE*

Maximum cruise power @ 35,000 ft.

8 pass. (1600 lbs) 1234 nm (2285 km)
6 pass. (1200 lbs) 1466 nm (2715 km)
4 pass. (800 lbs) 1690 nm (3130 km)
2 pass. (400 lbs) 1821 nm (3372 km)

Long range power @ 41,000 ft.

8 pass. 1431 nm (2650 km)
6 pass. 1715 nm (3176 km)
4 pass 2002 nm (3708 km)
2 pass. 2176 nm (4030 km)

*Equipped Standard Airplane with Collins Av.
Includes 200-pound allowance for pilot.

RATE OF CLIMB AT SEA LEVEL

(Two engines)

12,050 lbs (5466 kg) 3242 fpm (988 m/m)
10,000 lbs (4536 kg) 4110 fpm (1253 m/m)

(One engine)

12,050 lbs (5466 kg) 997 fpm (304 m/m)
10,000 lbs (4536 kg) 1450 fpm (442 m/m)

SERVICE CEILING

Two Engines – 100 fpm

12,050 lbs (5466 kg) 41,000+ft (12497+m)

One Engine – 50 fpm

12,050 lbs (5466 kg) 27,000+ft (8230+m)
10,000 lbs (4536 kg) 30,500 ft (9296 m)

STALL SPEEDS IAS –

Power idle at 12,050 lbs (5466 kg)
Flaps 30° gear down 84 kts (156 kph)
Flaps 0° gear up 93 kts (172 kph)

TAKE-OFF DISTANCE

Normal procedures at 12,050 lbs (5466 kg)
Lift-off speed (IAS) 107 kts (198 kph)
Ground run 1425 ft (434 m)
Tot. dis. over 50 ft obstacle 2325 ft (709 m)

LANDING DISTANCE

Without propeller reversing

Approach speed (IAS) 105 kts (195 kph)
Ground roll 1090 ft (332 m)
Tot. dis. over 50 ft obstacle 2317 ft (706 m)

With propeller reversing

Approach speed (IAS) 105 kts (195 kph)
Ground roll 820 ft (250 m)
Tot. dis. over 50 ft obstacle 2038 ft (621 m)

DISTANCE TO ACCELERATE & STOP

12,050 lbs. (5466 kg)

(includes allowance for failure recog. & reaction)

Decision Speed (IAS) 104 kts (192 kph)
Total distance 3180 ft (969 m)

DISTANCE TO ACCELERATE & GO

(includes allowance for failure recog. & reaction)

Tot. dis. over 50 ft obstacle 3160 ft (963 kg)
Tot. dis. over 35 ft obstacle 2935 ft (895 m)

MISSION PROFILE (MAX CRUISE PWR)

Operation based on the following conditions:

Basic empty weight 7565 lbs (3431 kg)
Ramp weight 12,135 lbs (5503 kg)
Take-off weight 12,050 lbs (5466 kg)
Mission length 1234 nm (2285 km)
Cruise altitude 35,000 ft (10668 m)
Payload 8 pax plus 240 lbs
Luggage 1,600 lbs (726 kg)
Pilot weight allowance 200 lbs (91 kg)
Mission time 3 hrs. 49 min.