

Piper PA-42 Cheyenne 400 Model Guide

The Piper PA-42 Cheyenne 400 is a pressurized twin-turboprop built 1984-1992, seating 6 to 11. Piper's records list it as the PA-42-1000 (Cheyenne IV), later renamed 400LS; 44 were built. The figures below come from the 400LS spec sheet, so check them against your aircraft's own handbook.

KEY TAKEAWAYS

- Spec sheet (400LS, PA-42-1000): two Garrett TPE 331-14 engines, each flat rated at 1000 hp, and a 12,050 lbs max takeoff weight.
- At max cruise power the spec sheet gives 351 kts TAS at 24,000 ft and 334 kts at 35,000 ft; service ceiling is 41,000+ ft.
- Check the Nichols 1H75-6 de-ice regulator date codes and the aileron hinge bracket AD (Piper SB 967) before you buy.
- Cheyenne cockpits and cabins have been called small, cramped and dark, and the line still carries a reputation stigma.

WEIGHTS, FUEL AND CABIN

Max ramp weight is 12,135 lbs, takeoff 12,050 lbs, landing 11,100 lbs and zero fuel 10,000 lbs. Standard empty weight is 7565 lbs, which leaves 4570 lbs useful load. Usable fuel is 570 US gal. The cabin is 275 in long, 51 in wide and 56 in high. Front and rear baggage compartments each take 300 lbs.

PERFORMANCE IN BRIEF

Range at max cruise power at 35,000 ft is 1234 nm with 8 passengers and 1821 nm with 2. Takeoff ground run is 1425 ft at 12,050 lbs, and landing ground roll without reverse is 1090 ft. Pressurization at 7.6 PSI differential holds an 8000 ft cabin at 35,000 ft.

PROPELLER UPGRADE AND RECORDS

MT-Propeller STC SA03487AT swaps the four-blade Dowty Rotol props for five-blade composite props. The maker claims about 5% shorter takeoff over 50 ft, about 5 kts more cruise and about 52 lbs less weight. If fitted, ask for the STC paperwork and the AFM supplement.

SPECIFICATIONS

Wing Span Ft	47.7
Length Ft	43.4
Height Ft	17
Cabin Length In	275
Cabin Width In	51
Cabin Height In	56
Usable Fuel Gal	570
Engine Power Hp Each	1000

PERFORMANCE

Max Cruise Speed 24000ft Kts	351
Max Cruise Speed 35000ft Kts	334
Service Ceiling Ft	41000
Range 8 Pax Nm	1234
Range 2 Pax Nm	1821
Takeoff Ground Run Ft	1425
Landing Ground Roll Ft	1090
Climb Rate Two Engine Fpm	3242

V-SPEEDS

Liftoff Speed Kts	107
Approach Speed Kts	105
Decision Speed Kts	104
Stall Speed Flaps 30 Gear Down Kts	84
Stall Speed Clean Kts	93

WEIGHT & BALANCE

Max Ramp Weight Lbs	12135
Max Takeoff Weight Lbs	12050
Max Landing Weight Lbs	11100
Max Zero Fuel Weight Lbs	10000
Empty Weight Lbs	7565
Useful Load Lbs	4570
Max Usable Fuel Lbs	3819
Baggage Limit Each Lbs	300

SAFETY NOTES

- Nichols 1H75-6 de-ice pressure regulators with date codes 1AE to 7AV may not hold the 16 PSI minimum; Service Letter 62 made inspection mandatory.
- The aileron AD calls for dye-penetrant checks at the inboard hinge brackets per Piper SB 967, repeated at intervals not over 100 hours until the improved brackets are fitted.
- The NZ AD schedule also lists the nose baggage door (DCA/PA42/6A) and icing flight manual revisions; confirm all FAA ADs are complied with.