

Cessna T182 Turbo Skylane Model Guide

The Cessna T182 Turbo Skylane is a four-seat, high-wing, single-engine piston aircraft, listed in the library from 1981. The Textron brochure describes a Lycoming TIO-540-AK1A making 235 hp, with 165 ktas max cruise, 971 nm ferry range and 998 lb useful load. Figures here are manufacturer brochure values, not those of any specific airframe.

KEY TAKEAWAYS

- Brochure figures: 235 hp Lycoming TIO-540-AK1A, 165 ktas max cruise, 1,040 fpm max climb, full power held to 20,000 ft.
- Max takeoff weight is 3,100 lb and empty weight 2,114 lb, giving 998 lb useful load plus 200 lb in the aft baggage area.
- The 971 nm range is a ferry figure: one pilot, 45% power, 45-minute reserve. Check those assumptions before relying on it.
- Lycoming lists 235 hp at 32 in. Hg and 2400 RPM for this engine, which has a slope controller that must be set correctly.

ENGINE AND POWERPLANT CHECKS

Lycoming Service Instruction 1257G lists the Cessna Turbo Skylane's TIO540 AK1A at 235 hp, 32 in. Hg manifold pressure and 2400 RPM. Its slope controller must be set by measuring manifold pressure at rated power and engine speed. Operators must know the manifold pressure versus altitude curves, because exceeding the limits could damage the engine. Ask for records of this setup and any overboost history (see Lycoming Service Bulletin No. 369).

AVIONICS AND AUTOPILOT

The brochure lists Garmin G1000 NXi with a GI 275 electronic standby and a GFC 700 autopilot with ESP and USP. It also lists ADS-B Out and In, with optional SurfaceWatch and Garmin Connex. A Dynon SkyView HDX autopilot servo STC (SA02594SE) covers 182E-182T, T182 and R/TR182. Confirm which system is installed and that the paperwork is complete.

CABIN, LOADS AND FIELD USE

The cabin seats four and measures 42 in wide, 49 in high and 11 ft 2 in long. The aft baggage area has its own door and takes 200 lb and 32 cu ft. Two doors ease loading. Takeoff ground roll is 775 ft at sea level, max weight and ISA conditions. The brochure describes heavy-duty landing gear for semi-prepared runways and a heated, constant-speed McCauley propeller.

SPECIFICATIONS

Wingspan Ft	36
Length Ft	29
Cabin Width In	42
Cabin Height In	49
Baggage Capacity Lbs	200
Engine Power Hp	235

PERFORMANCE

Max Cruise Speed Kts	165
Max Range Nm	971
Takeoff Ground Roll Ft	775
Max Climb Rate Fpm	1040
Max Cruise Altitude Ft	20000

WEIGHT & BALANCE

Max Takeoff Weight Lbs	3100
Empty Weight Lbs	2114
Useful Load Lbs	998
Baggage Capacity Lbs	200

SAFETY NOTES

- Lycoming says some turbocharged engines reach takeoff power only at full throttle and others at part throttle. The operator must know which type they fly.
- Failure to follow manifold pressure restrictions could result in engine damage (Lycoming SI 1257G). Learn the pressure-versus-altitude curves.
- Autopilot servo installs need the original control cables checked for condition, rigging, tension and diameter. A Form FAA 337 is required before return to service.