

Piper M500 Model Guide

The Piper M500 is a single-engine, pressurized turboprop with six-place seating, powered by a Pratt & Whitney Canada PT6A-42A flat-rated at 500 shp. Piper lists a 260 ktas max cruise, 1,000 nm range with 45 min reserve, a 30,000 ft max approved altitude and a 1,698 lb standard useful load. Garmin G1000 NXi avionics and flight into known icing (FIKI) equipment are standard.

KEY TAKEAWAYS

- Piper M500: 500 shp PT6A-42A, 260 ktas max cruise, and about 35 gph normal cruise fuel burn (Piper figure).
- Standard useful load is 1,698 lb with 170 US gal usable fuel, so check how many seats you can fill with full tanks.
- G1000 NXi, GFC 700 autopilot with Level Mode, ESP and underspeed protection are standard on newer aircraft.
- Check service bulletin compliance (static dischargers, fire extinguisher, prop de-ice harness) in the logbooks.

AVIONICS AND SAFETY SYSTEMS

Newer Piper M500 aircraft have the Garmin G1000 NXi with dual PFDs, a 12-inch MFD and the GFC 700 autopilot. Safety features include Automatic Level Mode (blue button), Electronic Stability Protection, Underspeed Protection and coupled go-around. Early 2015 aircraft list a GWX 68 radar and Aspen standby. Optional items such as TAWS-B, SurfaceWatch and ADS-B In traffic vary by aircraft.

WHAT TO CHECK BEFORE BUYING

Verify the specification yourself, since listings say it is the buyer's responsibility. Look at the prop type (4-blade or optional 5-blade composite), engine and airframe hours, and the de-ice group. Piper's brochure gives engine TBO as 3,600 hours with a hot section inspection at 1,800 hours. New-aircraft support was a 3-year airframe warranty, 7-year engine warranty and 5-year propeller warranty. Confirm what transfers.

WEATHER AND PILOT EXPERIENCE

A systems briefing on the PA-46 family counts 16 icing-related and 23 convection-related fatal accidents from 2012 to 2021. It cites limited weather experience, over-reliance on installed systems and weak radar and NEXRAD understanding. Budget for type-specific training and treat FIKI equipment and radar as aids, not permission to enter bad weather.

SPECIFICATIONS

Engine Flat Rated Hp	500
Fuel Usable Gal	170
Propeller Diameter In	82
Wingspan Ft	43
Length Ft	29.6
Height Ft	11.3

PERFORMANCE

Max Cruise Speed Kts	260
Range Nm	1000
Max Approved Altitude Ft	30000
Cruise Fuel Burn Gph	35
Takeoff Ground Roll Ft	1650
Takeoff Over 50ft Ft	2438
Landing Ground Roll Ft	1020
Landing Over 50ft Ft	2110

WEIGHT & BALANCE

Max Takeoff Weight Lbs	5092
Max Ramp Weight Lbs	5134
Standard Empty Weight Lbs	3436
Standard Useful Load Lbs	1698

SAFETY NOTES

- Service Bulletin 1237 (static dischargers): check P/N 456-904 for two lock washers within 50 hours; M500 serials through 4697455 are listed.
- Service Bulletin 1280A (H3R fire extinguisher): serials 4697001-4697590 are listed. Inspect within 100 hours or 30 days, with recurring checks before each flight until replaced.
- Hartzell SB HC-SB-30-375 covers the prop de-ice wire harness, which can rub on the spinner bulkhead filler plates. Confirm it was done on Raptor-series props.