

Diamond DA50 RG Model Guide

The Diamond DA50 RG is a five-seat, all-carbon-composite, retractable-gear single powered by a 300 hp Continental CD-300 jet-A1 engine. Manufacturer figures list a useful load of 1,210 lbs, a maximum speed of 181 KTAS and a maximum altitude of 20,000 ft. It has been in production since 2020.

KEY TAKEAWAYS

- Five seats in two rows, with large gull-wing doors, a 60/40 split folding rear bench and baggage space at the rear of the cabin.
- Manufacturer-quoted useful load is 1,210 lbs. Fuel burn at max range is about 8 gal/h of Jet-A1.
- Standard list price was \$1,150,000 USD (Jan 2023, ex factory, excluding taxes). TKS de-icing was a \$117,800 option.
- A 2 September 2023 DA50 RG engine failure was investigated by the Dutch Safety Board. Read the report before buying.

POWERPLANT AND AVIONICS

The Continental CD-300 is geared, liquid-cooled, turbocharged and runs on Jet-A1. It makes 300 HP at top power and 270 HP at max continuous. Two redundant full FADECs and a single power lever control it, driving an MT 3-blade propeller. The fuel tank holds 51.5 US gal (195 L). Standard avionics are Garmin G1000 NXi, GFC 700 autopilot with yaw damper, and Garmin ESP.

OPTIONS AND PRICING TO VERIFY

The 2023 price list shows these options: air conditioning \$57,350, TKS de-icing \$117,800 (25 kg/55 lb), oxygen \$42,200, GCU 476 keypad \$27,250 and Synthetic Vision \$14,000. The list says pricing and equipment can change without notice. Confirm which options a used aircraft actually has fitted.

WHAT TO CHECK BEFORE BUYING

The Dutch Safety Board report on OO-HAN covers bearing failure, engine failure training, survivability and post-impact fire. Its appendices include FADEC data, fuel sample analysis, engine teardown findings and oil sample analysis. Ask any seller for the engine's full service and oil-analysis history and whether any bulletins or engine work apply.

SPECIFICATIONS

Engine Power Hp	300
Max Continuous Power Hp	270
Fuel Capacity Gal	51.5

PERFORMANCE

Max Speed Kts	181
Max Altitude Ft	20000
Fuel Burn Gph	8

WEIGHT & BALANCE

Useful Load Lbs	1210
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SAFETY NOTES

- Dutch Safety Board: DA50 RG OO-HAN suffered an engine failure after departing Kempen on 2 September 2023, followed by an emergency landing.
- The Dutch Safety Board stresses training for partial engine power loss: recognise the signs, assess the situation, and decide under pressure.
- Garmin G1000 NXi guide: use the primary barometric altimeter, not geometric altitude, for air traffic control altitude compliance.