Robinson R66 NxG Model Guide

The Robinson R66 NxG is the latest version of Robinson's single-engine turbine helicopter. It has a Rolls-Royce RR300 engine, an all-glass Garmin cockpit and a standard 2-axis autopilot. Maximum gross weight is 2700 lb (1225 kg). The brochure lists new trims priced from $1,359,500. Prices are as of Mar. 2025 and subject to change.

KEY TAKEAWAYS

- The Robinson R66 NxG is limited to 2700 lb gross weight and carries 917 lb of pilot, passengers and baggage with full fuel.
- Brochure figures: cruise up to 110 kts, about 350 nm range with no reserve, and a 14,000 ft maximum operating altitude.
- NxG adds a Garmin glass cockpit, a 2-axis autopilot, an impact-resistant windshield and LED landing lights.
- Brochure trim prices run from $1,359,500 (Southwood) to $1,659,500 (Riviera) and can change without notice.

WHAT YOU ARE BUYING

The brochure lists a Rolls-Royce RR300 engine rated at 300 shp. It is derated to 270 shp for takeoff and 224 shp continuous. NxG features: Garmin TXi flight displays, a 2-axis Garmin autopilot, a polycarbonate impact-resistant windshield and new LED landing lights. Trims are Southwood, Palo Verde and Riviera Edition.

LOADING AND PERFORMANCE

Approximate empty weight is 1290 lb (585 kg). Usable fuel is 73.6 gal, about 493 lb. Maximum per seat is 300 lb, and baggage is limited to 300 lb total. Brochure performance at max gross weight: cruise up to 110 kts, range about 350 nm with no reserve, hover ceiling IGE and OGE over 10,000 ft, and climb over 1000 fpm.

WHAT TO CHECK BEFORE BUYING

The POH is for the R66, so confirm the NxG-specific supplement and the current POH revision (log of pages dated 14 May 25). Check that the airspeed indicator and tachometer markings match the current POH. Ask for the weight and balance for the actual aircraft. Solo pilots under 160 lb may need ballast to stay within CG limits.

SPECIFICATIONS

Max Gross Weight Lbs	2700
Empty Weight Lbs	1290
Usable Fuel Capacity Gal	73.6
Engine Power Hp	300
Takeoff Power Hp	270
Continuous Power Hp	224
Main Rotor Diameter Ft	33
Max Operating Altitude Ft	14000

PERFORMANCE

Cruise Speed Kts	110
Max Range Nm	350
Hover Ceiling Ige Ft	10000
Hover Ceiling Oge Ft	10000
Rate Of Climb Fpm	1000
Max Operating Density Altitude Ft	14000

V-SPEEDS

Vne At Or Above 2200 Lbs Kts	130
Vne Below 2200 Lbs Kts	140
Vne Autorotation Kts	100
Vne Doors Off Kts	100
Max Speed Above 83 Percent Torque Kts	65

WEIGHT & BALANCE

Max Gross Weight Lbs	2700
Min Gross Weight Lbs	1400
Max Per Seat Lbs	300
Max Baggage Lbs	300
Payload With Full Fuel Lbs	917
Fuel Weight Lbs	493
Min Solo Pilot Weight Lbs	160

SAFETY NOTES

- Low-G cyclic pushovers and aerobatic flight are prohibited. Abrupt control inputs may cause catastrophic failure of a critical component.
- Flight in known icing is prohibited. Engine anti-ice must be on in visible moisture at or below 4°C (40°F).
- Vne is 100 KIAS with any cabin doors removed, and 65 KIAS maximum above 83% torque.

AI-aggregated guide for the Robinson R66 NxG · sources: Robinson R66 NxG Weight & Balance (#20172) · R66 Pilot's Operating Handbook (#101157) · SECTION 2 LIMITATIONS (#20164) · Systems Description for the Robinson R66 NxG (#20174) · generated 2026-10-18 · Reference only, not for flight. Check the original documents before relying on this guide.