# DA40 SERIES AIRBORNE INNOVATION









#### DA40: FOUR SEAT VERSATILITY

Whether you are a new aviator looking for the perfect first airplane, an experienced IFR pilot with discerning tastes or a forward thinking flight school, the DA40 is the smart choice. The durable composite airframe, ultra low fuel burn and superb handling make the DA40 a great airplane for travel, leaseback, and training alike.



(Images from top to bottom) DA40 NG, DA40 Tundra Star, DA40 XLT Lycoming.

#### DA40 AT A GLANCE:

- 4 seats / big baggage space Superb visibility
- Durable Composite Airframe
   Superior Stability and Control
- Garmin G1000 NXi Super low fuel burn Jetfuel turbocharged
- AE300 Engine or Lycoming IO360M1A

#### DA40 NG KEYFACTS:







285 km/h or 154 kts



Max. Altitude 5,000m or 16,400 ft





#### DA40 XLT KEYFACTS:



Consumption at 65% 31 lt/h or 8.2 gal/h



Max. Speed 263 km/h or 142 kts



Max. Altitude 5,000m or 16,400 ft



**Useful Load** 408 kg or 900 lbs

"Taking delivery of a brand new DA40 NG was a dream come true. I have been the happy owner of a DA42 and had long wanted to add a sister single engine plane alongside the twin - for my owner-run rental business. I took the plunge and ordered the DA40 NG. She is beautifully designed, and has a character that shows through as you warm her up, playfully waiting to launch herself into the world. This plane soars rather than just takes off. In her short time in the UK, she has been all over Europe, including down as far as Portugal, and has

Sue Bell, DA40 NG and DA42 owner, UK

won many fans."

**Diamond** Page 3

# DA40 NG

#### **A NEW GENERATION**

The DA40 NG is an all round practical and versatile multiuse four seat airplane for the 21st century. Combining the best qualities of its venerable predecessors, the DA40 NG does it all, with a modern twist. Personal flying, instruction, cross country transportation, the DA40 NG offers a unique blend of practicality, performance, value and operating economy.



#### **PROPULSION**

The turbocharged 168 HP Austro AE300 jet fuel piston engine powers the DA40 NG, with technology not available in any other aircraft in class. It starts easily under all conditions, hot and cold alike, uses less than 8.5 gph at maximum continuous power and only 5.5 gph in a typical flight training environment, while delivering excellent cruise performance and sprightly climbs, thanks to turbocharging that maintains full power to 14,000'. It is turbine smooth, quiet and the most fuel efficient way to fly. The single power lever and redundant digital engine control offer ultimate reliability and ease of operation. It is as simple as it gets and lets you focus on flying.



The DA40 NG is the ultimate development of this popular single, incorporating the experience gained in several million hours of operation and years of service under the harshest of conditions. Its defining feature, the turbocharged AE300 jetfuel piston engine, elevates the DA40 to a new level. While the industry searches for solutions to replace leaded AVGAS 100LL, Diamond's DA40 NG sidesteps the issue by use of the most widely used aviation fuel, Jetfuel. Not only is Jetfuel leadfree, it is also lower cost, available globally, and less flammable than gasoline. Best of all, the DA40 NG, with its Austro AE300 turbocharged engine and aerodynamically efficient design, uses far less fuel than any comparable airplane.



Private owners will delight in the performance, handling, high quality finish, luxurious interior, thoughtful details and comfort features that make the DA40 such a pleasure to fly.

Commercial operators and leaseback owners will appreciate the ramp appeal, the reliability and low overall lifecycle cost.



#### **ROUGHTERRAIN LANDING GEAR**

Made out of proven light-weight and solid composite material and powered with a 168 hp state-of-the-art AE300 jet fuel engine from Austro Engine, the DA40 Tundra Star is equipped with all the advantages you love in its sister aircraft DA40 NG. But equipped with a special rough terrain landing gear you can explore all the uneven strips and terrains you ever wanted to. Bigger wheels on the main and nose landing gears, an improved wheel base, new rims, as well as special reinforcements and tougher structures give you the safety to land almost anywhere.



#### DESIGNED FOR ROUGH CONDITIONS

rounded by rough terrain and don't want to miss all the benefits of a modern aircraft with an impressive performance and range? Then the DA40 Tundra Star is your choice. The aircraft is equipped with a beefed-up landing gear and oversized tires. The all-new tricycle landing gear is able to withstand high stress of landings, enduring holes, ruts, and other irregularities. This makes the airplane very easy to handle on the ground. Furthermore, the AE300 jet fuel engine can use a range of different fuels, from Jet A-1, Jet A, and TC-1 to PT, giving you greater deployment flexibility.

You want to explore the great outdoors or are a flight school sur-





"The cabin is fairly comfortable and is equipped with the communication system between the passengers and the pilot what is essential for the trace adjust during the flight. Modern navigation aid and autopilot enable the crew to retain the heading and the height, to make modifications during the flight. The aeroplane DA40 is constructed in such a way that the minimum flying speed makes about 170 km/h, which is considered to be a comparatively high criteria under the conditions of Yakutia. To our minds the aircraft can be successfully implemented to carry out the aerial survey of DSO under the conditions of the vast tundra."

Director, E.F. Antono

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#### GREAT FOR TRAVELING AND TRAINING

The DA40 XLT is the ultimate development of this popular single, incorporating the experience gained in several million hours of operation and years of service under the harshest of conditions. While it cannot match the absolute fuel efficiency and economy of its Austro powered stablemates, the DA40 XLT's aerodynamically efficient airframe extracts a level of performance out of its 180hp Lycoming engine, normally associated with higher horsepower.



#### POWERED BY LYCOMING

The fuel injected normally aspirated Lycoming IO360M1A is the most advanced development of the long serving Lycoming 180 hp O/IO360 family. Installed in the DA40, the 180hp engine drives a choice of composite and metal constant speed 2 blade propellers by Hartzell or a 3 blade propeller by MT, offering each customer the choice of maximum performance, durability and value. The Lycoming IO360, delivers smooth and refined performance, has amassed millions of flight hours in high utilization operations worldwide, is familiar to A&P's everywhere and consistently reaches TBO and beyond.





"I sat in a lot of planes before making my decision. My DA40 feels a lot like a European sports car. When you sit in a Porsche and you touch or reach for something, it's so well designed that it feels like someone really paid attention to all the details, right down to the font used on the speedometer. I feel as though my Diamond is like that – a talented team really put a lot of thought into it. They started with a new idea, and each piece feels well considered and thought out."

Colin Summers, DA40 Owner, Carlifornia

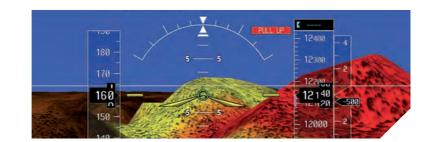
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#### **GARMIN G1000 NXI AND GFC700 AUTOPILOT**

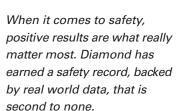
Once you fly the Garmin G1000 NXi cockpit and its optionally integrated Garmin GFC700 digital autopilot on the DA40 NG, you will not want to fly anything else. The Garmin G1000 NXi glass cockpit is the definite industry standard and equivalent to the avionics used in modern Airliner cockpits, a tremendous benefit for Flight Training Schools as it eases the transition of pilots from trainer aircraft cockpits to the modern airline environment. The Garmin GFC700 digital autopilot is significantly more precise than analogy systems - a pilot's dream. More integration, more functionality, more precision, better reliability – it all adds up to reduced pilot workload and better safety.





The DA40's industry-leading safety record is the result of Diamond's commitment to protecting occupants with a vast array of both active and passive safety features. Active safety features include stable handling at low speeds, short take-off and landing distances, superior visibility and state-of-the-art avionics. Passive safety features such as aluminum fuel cells protected by the DA40's dual carbon fiber spars, help prevent post impact fires, a 26G rated safety cell cockpit and a host of other built in features help keep you safe should the unexpected happen. As a result, the DA40 line tops the general aviation list with both the lowest overall and fatal rates (Source: Aviation Consumer January 2012).









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## DIAMOND FLIGHT TRAINING

#### **LESS FUEL - MORE FLIGHT HOURS**

Diamond aircraft burn up to 50% less fuel due to aerodynamic efficiency and fuel-saving jet fuel engines. You can benefit from additional cost savings through lower fuel prices for jet fuel.

#### **NO. 1 IN SAFETY IN GENERAL AVIATION**

Safety is critical to any business. Diamond has earned a safety record, backed by real world data, that is second to none. To learn more about our safety obsession visit our website at: www.diamondaircraft.com/about-diamond/why-diamond/safety

#### WE CARE ABOUT THE ENVIRONMENT

Diamond and Austro Engine invested a lot of time and money to bring new engines into aviation, which are environmentally acceptable, fuel-saving and exceptionally silent.

#### PROPRIETARY JET FUEL ENGINE

No manual mixture control, no magneto ignition, no manual priming, no prop control lever, no hard starting – hot or cold, no manual runup tests, no shock cooling, no cowl flaps, no power calculations based on rpm and manifold pressure. More efficiency in every regard.

#### **MODERN AVIONICS**

Back in 2001, Diamond Aircraft was the first to commit to GARMIN's - then top secret - fully integrated G1000 glass cockpit. The today's G1000 NXi, similar to those used in large airliners, offers unparalleled situational awareness and flight monitoring.

#### MODERN AIRFRAME

Made out of robust and strong glass and carbon fiber composite material, our safety cell meets high standards that are unique in our industry. Our rugged airframes have an unlimited lifetime and guarantee a high resale price.

#### YOUR PERFECT MARKETING TOOL: 21st CENTURY APPEAL

With Diamond Aircraft you'll be part of the future. Planes certified according to 21st century aviation standards and not according to the "old days".







#### **EXTERIOR STYLING: TWISTER**



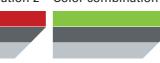
Color combination 1 Color combination 2 Color combination 3







Light Onyx Silver



Springtime Green Light Onyx Silver

#### **EXTERIOR STYLING: WAVE**



Color combination 1 Color combination 2 Color combination 3

Cobalt Blue Diamond

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Opal Red

Opal Red Springtime Green
Diamond Diamond

**EXTERIOR STYLING: STRIPES** 



Color combination 1 Color combination 2 Color combination 3



Black



#### **CUSTOMIZED EXTERIOR STYLING**

Diamond Aircraft is able to provide the ideal custom-made solutions for exterior films.

Gold



Choose any striping colour and design you wish or let it fit your company branding.





#### HIGH STANDARD / GREY-BROWN

### **INTERIOR MATERIAL: SEATS**



Genuine leather



Functional leather

### INTERIOR MATERIAL: LINING



Ceiling



Carpet

#### INTERIOR PAI



- Ultra light interior materials
   Hand made, high-quality upholstering
- Climate-controlled seats
   Flame resistant interior materials
- Optional: Comfort through stageless adjustable seats













### DA40 variants in global operation

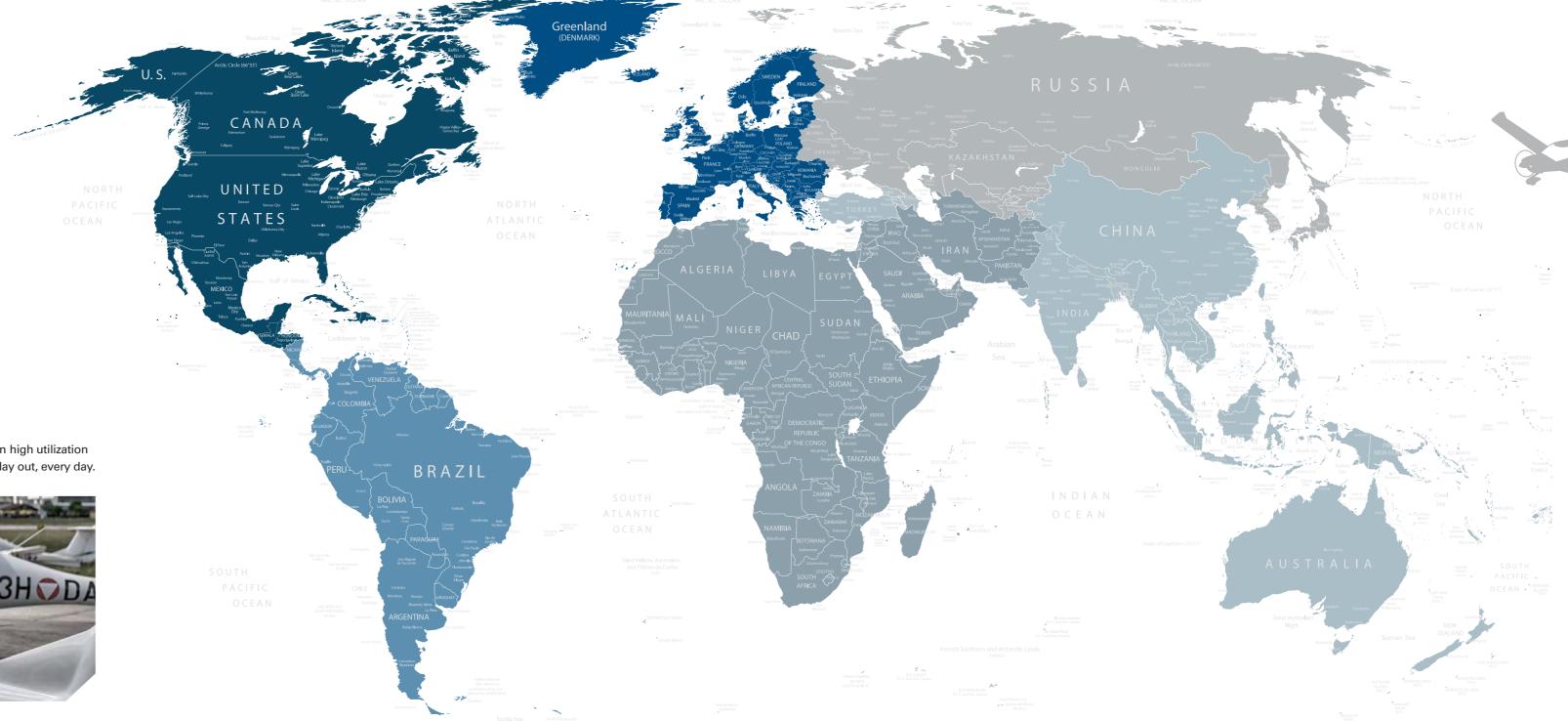
(Year 2003 - 2021)

North America	935 Units
Latin America	30+ Units
Europe	470+ Units
Middle East / Africa	125 Units
CIS States	165+ Units
Asia and Pacific	725+ Units

WORLDWIDE 2,450+ UNITS

With more than 2,450 Diamond DA40's in worldwide service today, a big number in high utilization commercial operations, the DA40 fleet is proving its durability and safety, day in and day out, every day.







### DA40 RANGE

#### **DA40 NG RANGE**

POWER: 45% (white circle on map)

Range: 985 nm (1,824 km)

Time: 9.8 hrs

Speed: 101 kts (187 km/h) Consumption: 4 gal/h (15 l/h) POWER: 92% (light blue circle on map)

Range: 724 nm (1,340 km)

Time: 4.7 hrs

Speed: 154 kts (285 km/h)

Consumption: 8.3 gal/h (31.5 l/h)

#### **DA40 XLT RANGE**

POWER: 45% (yellow circle on map)

Range: 939 nm (1,740 km)

Time: 8.6 hrs

Speed: 109 kts (202 km/h)
Consumption: 5.8 gal/h (21.9 l/h)

POWER: 75% (orange circle on map)

Range: 740 nm (1,370 km)

Time: 5.4 hrs

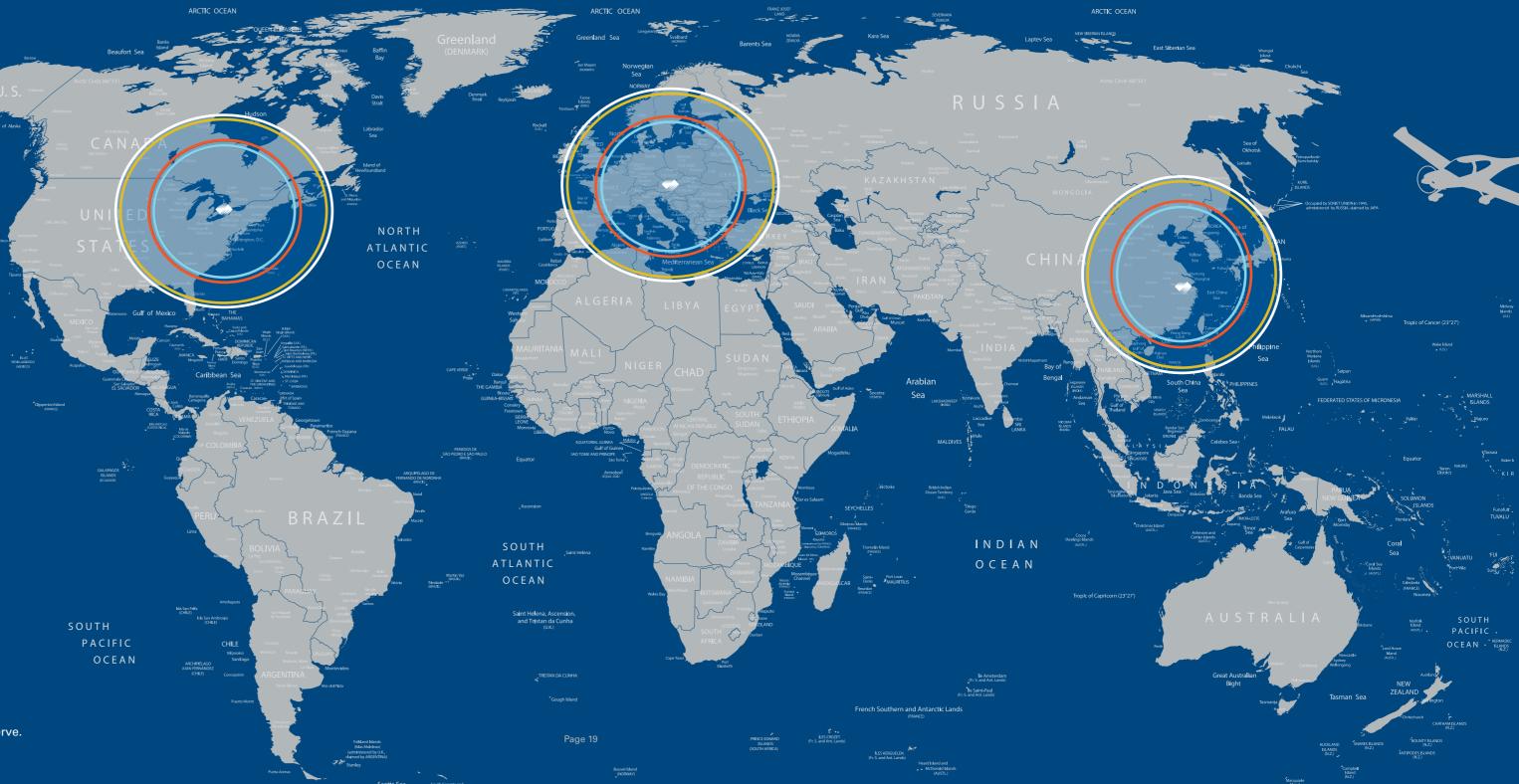
Speed: 137 kts (254 km/h)

Consumption: 9.2 gal/h (34.8 l/h)



The above data are approximately specifications and may change without notice.

Range calculation does not consider additional fuel consumption for taxi, take-off, climb, descend or reserve.





#### **POWER PLANT**

Engine	Austro Engine AE 300 turbocharged common-rail injected 2.0 liter diesel engine with 168 HP and EECU single lever control system
Propeller	MT propeller MTV-6-R/190-69 3-blade constant speed propeller
Fuel grades	Jet A-1, Jet A,TS-1 (Russia, Ukraine), RT (Russia, Ukraine), No. 3 Jet Fuel (China), JP-8

#### **DIMENSIONS / MASS / LOADING**

Length	8.06 m	26 ft 5 in
Height	1.97 m	6 ft 6 in
Wingspan	11.63 m	38 ft 2 in
Seats	4	4
Empty weight without options	903 kg	1,991 lbs
Max. useful load	407 kg	897 lbs
Max. take-off mass	1,310 kg	2,888 lbs
Fuel capacity total (usable fuel) main tank auxiliary tank	147.6 lt / 118 kg 106 lt / 84 kg 41.6 lt / 34 kg	39 US gal / 260 lbs 28 US gal / 185 lbs 11 US gal / 75 lbs

#### PERFORMANCE (MTOM, ISA)

Max. cruise speed (16,000 ft, MCP)	285 km/h TAS	154 kts TAS
Cruise speed at 60% (14,000 ft)	230 km/h TAS	124 kts TAS
Stall speed, landing configuration	107 km/h CAS	58 kts CAS
Max. rate of climb (MSL)	3.3 m/s	651 ft/min
Max. range (FL160, 50% PWR) incl. climb, no reserves	1,730 km	934 nm
Range at 60% (incl. long range tanks, 14,000 ft) incl. climb, no reserves	1,698 km	917 nm
Fuel consumption at 60%	19.3 lt/hr	5.1 US gal/hr
Take-off performance (MSL, ground roll / take-off obstacle)	397 m / 590 m	1,302 ft / 1,935 ft
Landing performance (MSL, ground roll / landing distance)	318 m / 650 m	1,043 ft / 2,132 ft
Max. operating altitude	5,000 m	16,400 ft
Max. demonstrated crosswind	46 km/h	25 kts

Specifications apply to standard equipped aircraft, if not otherwise stated. The above data are approximately specifications and may change without notice.

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#### **POWER PLANT**

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Engine	Lycoming IO-360 M1-A AVGAS Piston Engine with 180 HP
Propeller	Hartzell 2-blade metal constant speed propeller or Hartzell 2 blade composite constant speed propeller or MT 3-blade constant speed propeller
Fuel grades	AVGAS / 100LL / 100 / 130LL

#### **DIMENSIONS / MASS / LOADING**

Length	8.01 m	26 ft 3 in
Height	1.97 m	6 ft 6 in
Wingspan	11.94 m	39 ft 2 in
Seats	4	4
Empty weight without options	792 kg	1,746 lbs
Max. useful load	408 kg	900 lbs
Max. take-off mass	1,200 kg	2,646 lbs
Fuel capacity total (usable fuel) with long range tanks	189 lt / 136 kg	50 US gal / 301 lbs

### PERFORMANCE (MTOM, ISA)

Max. cruise speed (MSL, MCP)	263 km/h TAS	142 kts TAS
Cruise speed at 75% (6,000 ft)	254 km/h TAS	137 kts TAS
Stall speed, landing configuration	96 km/h IAS	52 kts IAS
Rate of climb (MSL)	4.0 m/s	780 ft/min
Max. range (10,000 ft, 55% PWR, best eco) no climb, no reserves	1,569 km	847 nm
Fuel consumption at 65% (6,000 ft)	31 lt/hr	8.2 US gal/hr
Take-off performance (MSL, ground roll / take-off obstacle)	305 m / 450 m	1,000 ft / 1,476 ft
Landing performance (MSL, ground roll / landing distance)	290 m / 620 m	951 ft / 2,033 ft
Max. operating altitude	5,000 m	16,400 ft
Max. demonstrated crosswind	37 km/h	20 kts

Specifications apply to standard equipped aircraft, if not otherwise stated. The above data are approximately specifications and may change without notice.

**₩ Diamond** 

## AVIATION AS UNIQUE AS YOU ARE





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