





# **PA40** All-Electric Aircraft

From less to zero emissions, from quiet to almost silent!

# Changing the future of flight

The eDA40 shall be the first EASA/FAA CS/Part 23 certified electric airplane in its category. With DC fast charging offering short turnaround times, it is an exceptional sustainable aircraft for the flight training market of tomorrow.

"The testing of the all-electric eDA40 is an important step towards future pilot training in an even more environmentally friendly manner." Matthias Spohr, CEO Lufthansa Aviation Training

The eDA40, a derivative of the existing and certified DA40 series, shall be the first certified electric airplane in its category and the greenest way of learning to fly:



DE-VMW

# Propulsion & Avionics

**397 LBS** 

# All-electric power & top-notch avionics

## **Electric Motor**

The SAFRAN ENGINEUS<sup>™</sup> Aircraft Electric motor is a state-ofthe-art self-contained direct drive 125 kW propulsion system offering very high operating efficiencies exceeding 94%. The dual winding/controller architecture offers an enhanced reliability and safety, similar to twin-engine aircraft, on a single engine aircraft platform. The air cooling guarantees an easy to maintain, simple and cost efficient cooling system.



# Flight Deck

The eDA40 fully integrated Garmin G1000 NXi flight deck offers superior situational awareness, convenience and safety.

.>> 117 N



### Batteries

# Charged by Electric Power Systems

The eDA40 will have Electric Power Systems' EPiC<sup>™</sup> technology dual string battery system installed that includes: muliple segregated battery modules, high voltage battery power management units, service disconnects, high voltage power distribution and charge interface. Electric Power Systems' Direct Current (DC) fast charging system is capable of turning around a depleted aircraft in under 20 - 30 minutes.





### **Training Concept**

# Sustainable Flight Training

## Fleet Commonality

The eDA40 will be the perfect add-on to your flight school concept: The eDA40 can be used for the first phase of pilot training, circuit training and for all flights in the vicinity of the airfield while the DA40 NG is the ideal aircraft for longer cross-country flights which require more endurance and range.

With a fleet consisting of the all electric eDA40 and the jet fuel powered DA40 NG and DA42-VI you fly as eco-friendly as possible - All-electric aircraft have net zero emission during flight. Jet fuel engines have much lower emissions compared to leaded or even low leaded aviation fuels and save many gallons of fuel and money as they will burn up to 50% less at equal power.









### Low Cost of Operation

Creating an eco-conscious and cost effective option for the training market has always been at the core of Diamond Aircraft.

The eDA40 operating costs are expected to be reduced by over 35 % compared to traditional piston aircraft.





# eDA40 Preliminary Technical Specifications

#### **Power Plant**

Motor	125 kW SAFRAN Electrical & Power ENGINeUSTM 100

Battery 80 kWh EPiC Power battery by Electric Power Systems (EPS)

#### Performance

Battery*	80 kWh	
Endurance* Range	74 min incl.	reserves
(as a function of endurance)*	117 nm	217 km
Payload*	397 lbs	180 kg

#### Mass and Loading

Seats**	2-3	
Empty weight*	2,491 lbs	1,130 kg
Useful load*	397 lbs	180 kg ¯
Max. take off mass	2,888 lbs	1,310 kg



\*Calculated, preliminary technical specifications.

\*\*Initially as a 2-seater. As battery capacity develops the eDA40 will be available as an optional 3-seater. The above data are approximately specifications and may change without notice.

NORTH & SOUTH AMERICA, AUSTRALIA, NEW ZEALAND: 1560 Crumlin Sideroad, London, ON, Canada, N5V1S2 Phone: +1 800 268 4001 sales-canada@diamondaircraft.com

#### EUROPE, MIDDLE EAST, AFRICA, ASIA (HQ): N. A. Otto-Strasse 5, 2700 Wiener Neustadt, Austria Phone: +43 2622 26700 sales-austria@diamondaircraft.com

CHINA: Wanfeng Airpark, Dashiju Town Xinchang County, Zhejiang Province, P. R. China

All specifications, weights, representations, colors, equipment, use of materials and model references provided herein are for purely illustrative purposes and legally non-binding, subject to alterations and not warranted or guaranteed to be true or accurate. Actual useful load will vary depending on options installed on the aircraft. Any and all information given in this brochure cannot exempt the person operating the aircraft to use actual data for flight planning. The aircraft and/or product, and the chosen optional equipment (if any) shall meet exclusively the characteristics and specifications as defined and agreed in the written agreement with Diamond Aircraft Group. Referenced Diamond Aircraft trademarks are owned by Diamond Aircraft Industries GmbH or its subsidiaries. All other brands, product names, company names, trademarks and service marks are the properties of their respective owners. All rights reserved. ©2024, Diamond Aircraft Industries GmbH. For additional information on Diamond Aircraft and its products please visit www.diamondaircraft.com. 04/2024 S\_30607



