

# DA20-C1



SPORTY. SLEEK. EXCITING. YET SURPRISINGLY AFFORDABLE.

#WeFlyDiamondAircraft

 **Diamond**  
AIRCRAFT



## Airframe

With a fighter-like canopy, offering easy access to the cockpit, responsive center stick pushrod controls and comfortable bucket seats, the DA20 will put a smile on any pilot's face. It has pleased some of the world's toughest customers, including the United States Air Force for over 15 years. Boasting a sea-level climb rate of 1,000 fpm, a cruise of over 130 kts, and a take-off distance of only 1,600 feet over a 50 foot obstacle, the DA20's performance shines, even at high density altitudes. Spin certified and with a slow 45 kcas stall speed, the DA20 is not only sporty, but stable – and has a demonstrated crosswind landing component of 20 knots!

The sporty cockpit is one of the most comfortable and intuitive in its class thanks to ergonomically designed seats, leather or sheepskin seating surfaces with 4-point inertia reel safety harnesses and a professional instrument panel with top-quality equipment and materials throughout. The DA20 canopy and rear windows, together with a forward seating position relative to the wing, offer incredible outward visibility to help you navigate, spot other traffic and above all, enjoy the flight. Composite construction means strength and durability for the long run – including no defined structural life limit airframe. The smooth, rivet-free construction dramatically reduces drag, saves weight and resists bumps and scrapes. The low-maintenance polyurethane topcoat and underlying epoxy primer will keep your DA20 looking sharp for years. Far more resistant to hangar rash than sheet aluminum aircraft, the DA20's composite airframe is easily repaired if the unexpected happens.

Aerodynamic and tough, the rugged spring aluminum main landing gear and elastomeric-shock nose gear are tough enough for flight training and are virtually maintenance free. The optional aerodynamic wheel fairings add speed, fuel economy and overall good looks.

The DA20 has an integrated safety cell, surrounding the cockpit and vital systems for excellent crashworthiness and flammable fluid fire protection.

The airframe is modular and all replacement parts, from control surfaces to entire wings and other major assemblies can be replaced individually, in case of damage, minimizing cash-draining AOG situations.

## Propulsion

The fuel-injected 125 hp Continental Motors IO-240 with 2-blade fixed pitch propeller, installed in the DA20-C1, offers excellent climb and cruise performance, even at higher-density altitudes. This reliable and well-proven conventional AVGAS engine has logged millions of flight hours, is well known to technicians everywhere, with ready-access to parts and service worldwide. The engine installation is designed for durability and easy maintenance with crackproof composite forward and aft baffles, robust stainless steel exhaust, easy access to filters and regular maintenance items, and quickly removable cowlings.

## Avionics

The DA20's instrumentation and avionics are designed for safety, positive learning transfer, reliability and value. The current version of the DA20-C1 is equipped with the latest industry-leading avionics by Garmin, new and improved engine gauges and centrally located conventional standby instrumentation for conventional and partial panel training. The standard Garmin G500 TXi combines a high-resolution primary flight display (PFD) and multi-function display (MFD) in one 10-inch-wide bezel to bring the basic training cockpit into the 21st century. It provides a great foundation for anyone moving up to Garmin's G1000. A comprehensive list of options let you select exactly what you need and nothing you don't.

# DA20 Standard Features and Options

## Power Plant

125 hp TCM IO-240-B3B Piston Engine  
Sensenich W69EK7-63, 2-Blade Wooden  
Fixed Pitch Propeller  
24 US gal (90 L) Fuel Tank

## Avionics

Integrated Garmin G500 TXi Glass Panel Cockpit Including:

Garmin GTX 335 ADS-B "Out" Panel Mount Transponder  
Analog Airspeed Indicator and Altimeter  
Garmin GDC 72 Air Data Computer  
Garmin GMA 345 Audio Panel with Bluetooth Connectivity  
Garmin GTN 650Xi GPS/NAV/COMM/MFD with  
Safety-Enhancing Glide Range Features  
Garmin GTR 225 Comm Radio (Number 2 comm)  
Garmin Flight Stream 510  
ELT 406 MHz  
Hourmeter  
Tachometer  
Magnetic Compass  
Garmin FliteCharts (subscription required)

## Safety Concept

Composite Cabin and Ergonomic Safety Seats  
"FAILSAFE" Airframe and Wing Design  
4-Point Safety Harness with Inertia Reels

## Interior Equipment

Sheepskin Seat Cushions  
Premium Light Grey Carpet  
Overhead Map and Reading Lights  
Extended Glare Shield  
Engraved Aluminum Throttle Quadrant Cover Plates  
Cargo Net

## Included Features

Digital Vertical Trim Indicator  
Integrated Instrument Lighting  
Avionics Master Switch  
UMA Engine Instrumentation with Internal Lighting  
Two USB Charging Ports  
Manually Adjustable Rudder Pedals  
Electrically Operated Flap System  
LED Position Lights  
Large Tinted Canopy

### Ground Support Equipment Package:

Tow Bar	Control Locks
Fuel Sampler Device	Pitot Tube Cover
Fuel Measuring Device	Stall Warning Horn Cover
Aircraft Flight Manual	Handheld Microphone
Engine Winter Kit	Egress Hammer

## Exterior Features

Taxi Light  
Landing Light

## Avionics – Optional

Avidyne SkyTrax600 Traffic Advisory System (TAS 600A)  
Garmin GI 275 ADAHRS Flight Instrument  
(Replaces analog altimeter and airspeed indicator)  
Garmin GTX 345 ADS-B "In"/"Out" Panel Mount Mode-S Transponder  
Garmin GTR 225A Comm radio (Required for single European sky mandate)  
Genesys Aerosystems System 30 Autopilot  
Garmin Synthetic Vision Technology  
Jeppesen ChartView Approach Plates (1 year free subscription)

## Additional Options

Diamond Airframe and Engine Program by Piston Power™  
"Push to Engage" Ignition Key System  
External Power Unit Receptacle  
Tanis Engine Preheat System  
Heated Pitot Tube  
Wheel Fairings on Nose and Main Landing Gear  
Custom Exterior Striping  
Custom Registration Number (USA Only - 4 month lead time)  
Factory Maintenance Training

## Propeller Options

MT 175 R 150-2Ca, 2-Blade Wooden Fixed Pitch Propeller  
with Stainless Steel Leading Edge  
Sensenich W69EK7-63GM, 2-Blade Wooden Fixed Pitch Propeller  
with Metal Erosion Shield

## Fuel & Capacity

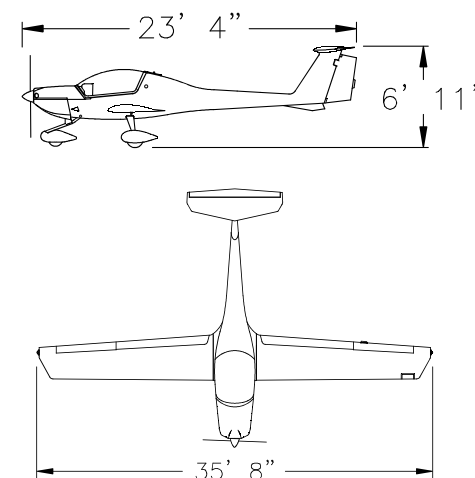
Fuel Capacity: 24.5 USG  
Unusable: 0.5 USG

## Weights

Max Take-off Weight: 1,764 lbs  
Max Ramp Weight: 1,770 lbs  
Max Zero Fuel Weight: N/A  
Max Landing Weight: 1,764 lbs  
Standard Empty Weight<sup>1</sup>: 1,180 lbs  
Useful Load<sup>1</sup>: 584 lbs  
Max Fuel Weight<sup>1, 2</sup>: 144 lbs  
Full Fuel Payload<sup>1, 2</sup>: 440 lbs

<sup>1</sup> Weights and loads shown are for standard configuration. Selection of optional features may affect these weights. S/N specific production variances can occur.

<sup>1,2</sup> Fuel density assumed at 6 lbs / USG



## Performance

### Speeds

$V_{ne}$  164 KIAS  
 $V_r$  44 KIAS  
 $V_{f1}$  (T/O) 100 KIAS  
 $V_{f2}$  (LDG) 78 KIAS  
Max Demonstrated Crosswind 20 kts

### Cruise Performance

Max Speed: 130+ KTAS @ MCP (Sea Level, ISA)  
Cruise Speed: 138 KTAS @ 75% / 5.5 gph (4,000 ft, ISA+10C)  
Max Endurance<sup>1</sup>: 5.1 hrs @ 45% Power / 4.7 gph (12,000 ft, ISA)  
Max Range<sup>1</sup>: 544 nm @ 52% Power / 5.2 gph (12,000 ft, ISA)

### Climb Performance

930 fpm @ 100% power<sup>1</sup> Sea Level, ISA

<sup>1</sup> At 1,600 lbs

### Runway Performance

T/O Dist @ MTOW (grnd roll / over 50 ft obst): 1,256 ft / 1,640 ft  
LDG Dist @ MTOW (grnd roll / over 50 ft obst): 661 ft / 1,360 ft

### Ceiling

Certified Ceiling, Normal Ops: 13,120 ft



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