

*CALIDUS*

PASSIONATE LIFESTYLE

  
**Auto  
GYRO**  
Enjoy the difference



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## OUTDOOR VIEW INDOOR COMFORT

### The panorama view

Calidus is AutoGyro's closed cabin tandem two-seated gyroplane model. When it was released in 2009, it was the world's first formally certified factory-built gyroplane of this configuration. Calidus is loved not just for fun, but also by flight schools, tourism, and law enforcement agencies.

The panoramic canopy design provides the pilot and passenger in the rear seat an in-

door lounge environment and an amazing near 360-degree view in the air. The pilot and the passenger are able to enjoy their unique flight experience together, unencumbered with outdoor clothing.

With the built-in cabin heater, heated seats, lumbar support and adjustable seat position, this amazing aircraft offers excellent cabin comfort.



## STYLISH, AND NIMBLE TO FLY

### The Sport DNA

Calidus is unique in its design and technical configuration. Equipped with a Rotax 916 iS, 915 iS, 914 ULS or 912 UL engine, this lightweight aircraft is a joy to fly. The maximum speed is 225 km/h, and the flight duration is up to 3.5 or 4.5 hours with long range tank\*. The fuel efficiency is excellent due to the carefully designed aerodynamics.

The nimble handling characteristics are perfectly balanced with its extraordinary stability, especially when coping with turbulence. Pilots adore the “Fighter Jet” feeling, with the slim cockpit, compact yet effective instrument panel, and fabulous visibility.

The panorama canopy brings not only this magnificent view from the air, but also gives the pilot extraordinary visibility of his flight environment and other traffic, maximizing safety for both the pilot and the passenger.

\* typical aircraft configuration: 1 pilot (80kg), max fuel, 2000 ft MSL; subject to local regulatory approval.



## CRUISE OR ADVENTURE? IT IS YOUR CHOICE

All-in-one cabin environment

### PANORAMA CANOPY WITH SUN SHIELD OR SUMMER CANOPY

The panorama canopy is available in several forms. It can be built with open sides, a painted sun shield, a taller canopy, or combinations of those, to enable you to enjoy your flight whatever the weather.

### SEAT HEATER AND LUMBAR SUPPORT

Optionally both seats can be fitted with heaters in the base and the back cushions, giving a wonderful warm feeling. The lumbar support greatly enhances comfort.

### SEAT POSITION

The front seat can be moved axially and by re-

clining the seat, giving the perfect position for pilot comfort.

### POWER LEVER

On the seat left side control panel (left hand), right hand on a stick with press-to-talk button, trim and pre-rotate activator for the best possible ergonomics.

**REAR SEAT INSTRUCTION EQUIPMENT** is available for instructors, creating an excellent instructor craft for all seasons.

### FIT-IN TRAVEL BAG

Are available, enabling you to make the best use of the luggage spaces in the aircraft.



## FINGERTIP CONTROL ON YOUR JOURNEY

### The best-fit cockpit panel

AutoGyro is proud to offer a range of cockpit panels to suit all needs, from simple minimalist arrangements to high-end fully integrated cockpits with the proven Garmin technology.

AutoGyro aircraft are available all over the world, using proven globally accessible equipment. Partnering with BRP Rotax and Garmin enables AutoGyro to ensure worldwide support for its products. This equipment is state of the art, and subject to change as technology advances.

The combination of optional Garmin gauges along with analogue gauges in the panel is designed to provide unparalleled functionality to the pilot.

You can easily mount your mobile devices of multiple generations to the cockpit panel with an additional holder, and charge them during your journey. It further enables easy access to digital content such as GPS navigation, live weather, external flight information, communications, and even music.



## BE SEEN

The concept of physical and electronic visibility

Conspicuity within the world of aircraft means to be seen, either physically or electronically – and to see other aircraft. AutoGyro embodies the latest equipment, ADS-B (Automatic Dependent Surveillance – Broadcast) requirements, Mode S transponder, and all associated devices as they develop. AutoGyro aircraft are fully compliant with ADS-B transmission requirements, where required. Physical conspicuity is also key to safety, and in this regard, AutoGyro offers a range of suitable strobe and navigation lighting for both day and night VFR lighting.

Navigation and strobe lamps are tail fin mounted for excellent visibility and minimal cockpit flash. AutoGyro night lighting is fully certified for night VFR operation, where night operations are permitted. It includes basic landing lights and an optional super-bright under-body landing light. Excellent balanced and dimmable instrument lighting in both cockpits, with even a map light for both seats, make night operations a pleasure.

Additional red anti-collision beacons are also available, mounted on top of both main wheel covers, for when 'being seen' is critical.



## BE SAFEGUARDED

The exclusive safety concept

Just like modern cars, numerous safety sensors and measures are developed and equipped into an AutoGyro gyroplane. The unique safety measures unveil the real German craftsmanship. The AutoGyro starting point is always occupant protection. This is where the proven AutoGyro safety concepts count.

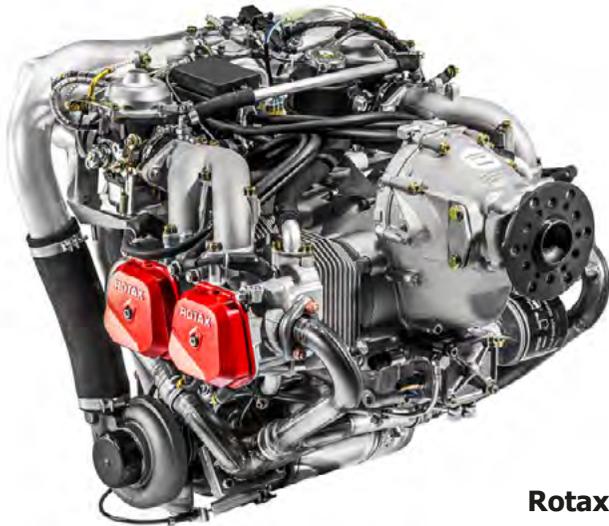
For instance, the rugged glass and carbon occupant safety cell has been proven in tests to exceed the toughest world safety requirements and proven in service to fulfill this role.

Multiple warning sensors are equipped as

standard to a Calidus to keep the pilot fully aware of the aircraft's status. Indicators such as low fuel, a low voltage lamp with an integrated management system, fuel pressure, independent multiple sensors such as oil pressure and low oil pressure warning, coolant temperature and high coolant temp warning.

All these systems are designed to provide redundancy and amplified warnings to ensure full situational awareness.

This is where the years of AutoGyro experience and knowledge make the difference.



**Rotax 914 UL 115hp engine**



**Rotax 912 ULS 100hp engine**

## THE HEART OF A TRUE SPORTS ENTHUSIAST

The reliable and strong engine performance

The Calidus aircraft is available with four engine options, the Rotax 916 iS 160hp, the Rotax 915 iS 141hp, the Rotax 914 UL 115hp engine, and the Rotax 912 ULS 100hp engine. These engines are exceptionally reliable and well-loved power plants, which have been proven in AutoGyro service.

Noise is reduced by the addition of an in-house manufactured after muffler, and engine warm-up time is reduced by the fitment of both oil and coolant thermostats as standard. An auxiliary alternator is available to power additional equipment such as camera and Lidar systems. All four engines have exceptional power supply capabilities for our aircraft.



**Rotax 915 iS 141hp engine**



**Rotax 916 iS 160 hp engine**

Rotax 915/916 iS 141/160hp engines are turbocharged and fuel injected, and state of the art technology in modern aircraft engines. No carburettor icing with these engines in your aircraft. They are fully computer controlled, enabling excellent low fuel burn in the cruise, whilst providing startling performance when used to their potential. Two integral independent alternators mean that the engine management system has a dual redundant safe energy supply. In normal use the primary alternator supplies the engine management system, and the secondary supplies all on board systems,

with fully automatic switching in case of failure. An auxiliary alternator is available to power additional equipment such as camera and Lidar systems. Featuring also dual ignition, dual fuel injection, and even dual engine sensor arrays, these engines are exceptionally reliable power supplies for our aircraft.

# TAILORED TO YOUR NEEDS - INTERIOR

Cockpit configuration\*



More configuration options are available! Please talk to your sales representative for details.

STANDARD



DUAL GARMIN G5



CALIDUS 915/916 IS BASIC PANEL



\*Cockpit layouts may vary to suit customer and market requirements, and are subject to change.

**1. f.u.n.k.e. radio and transponder or TRIG transponder**

**2. Optional fitment of additional Garmin G5 or other Garmin products**

**3. 4. Garmin G5**

- Airspeed
- Altitude attitude
- Vertical speed
- Gyro compass
- Slip ball

# TAILORED TO YOUR NEEDS - INTERIOR

Cockpit configuration \*



More configuration options are available! Please talk to your sales representative for details.

IPAD MINI 4



GARMIN G3X



GARMIN G3X WITH G5



\*Cockpit layouts may vary to suit customer and market requirements, and are subject to change.

## 1. 2. Garmin G5

- Airspeed
- Altitude attitude
- Vertical speed
- Gyro compass
- Slip ball

## 3. f.u.n.k.e. radio and transponder or TRIG transponder

## 4. iPad 4 MINI

- Full map displays

## 5. Garmin G3X GDU 460

- 10 inch touch screen
- Full map displays
- Full flight management data

## TAILORED TO YOUR NEEDS - INTERIOR

Seat cushion options



Seat covers are customizable in a variety of colours.



More configuration options are available! Please talk to your sales representative for details.



**Seat Cover Standard**



**Seat Cover Customized**  
Optional stitching and leather colours

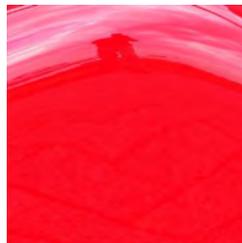
# TAILORED TO YOUR NEEDS - EXTERIOR

Body Painting - Let your imagination run wild

## BASIC COLOUR OPTIONS



TRAFFIC WHITE



CORRIDA RED



RACING YELLOW



Body paintings are customizable in a variety of colours.



More configuration options are available! Please talk to your sales representative for details.

## DESIGN COLOUR



Viper Green Met



Alfa Romeo Blue Francia



Porsche Lava Orange

## DESIGN LINES



Pearl Metallic Red Crystal Shine & Bezova Cappuccino / Cappuccino Beige



Alfa Romeo Blue Francia & Alcantara Grey Matt



Bentley Flame Orange & Alcantara Grey Matt



Oryx White Metallic & Blue Metallic



Ford Deep Impact Blue Metallic



Porsche GT3 Orange



BMW Space Grey Metallic

# TAILORED TO YOUR NEEDS - FUNCTION

## Propeller, Rotor and Tyres

### PROPELLER



**HTC3 OR HTC4-BLADE PROPELLER**

A robust ground adjustable propeller comprising carbon fibre composite blades fitted into a 2-part aluminium hub. Fixed pitch propellers are simple and light. However, a fixed pitch propeller must be pitched to give the best compromise of climb rpm without being set to not over-rev in high-speed level flight. To get the best performance from this streamlined aircraft, an in-flight pitch adjustable propeller is recommended, which also enables the use of reduced rpm in the cruise for low noise generation and low fuel burn, and high static thrust for short take-off.



**WOODCOMP IN-FLIGHT PITCH ADJUSTABLE PROPELLER**

The electric KW-31 has been used by AutoGyro for many years and is extremely reliable. This is a full constant speed propeller delivering full engine rpm – or any rpm desired by the pilot – in all operating conditions. It provides exceptional static thrust for short take-offs.



**IVOPROP ELECTRIC IN-FLIGHT PITCH ADJUSTABLE PROPELLER**

The Ivoprop has been in use by Autogyro for more than 15 years and is light and robust. This propeller is electrically adjusted via a cockpit switch to suit the pilots' demands.

### ROTOR



More configuration options are available! Please talk to your sales representative for details.



**8.4m Standard**

**8.4m TOPP** Excellent all-round system with good inertia and excellent long range cruise handling.

**8.6m TOPP** Large disc area gives slightly more drag, but more lift. Ideal where flight operations are generally with a mass of 560kg or above, or in warmer or higher environments.

**8.8m Standard** For high load operations.

### MAIN WHEEL TYRES



**STANDARD TYRES**

Sava 6PR aircraft certified tyres.

**LIGHT WEIGHT TYRES**



**OPTIONAL HEAVY DUTY TYRES**

Heidenau 8PR tyres (+0.5kg each).

Recommended for school or extensive tarmac operations.

## TAILORED TO YOUR NEEDS - ACCESSORIES

### Additional Options



1



2



3



4



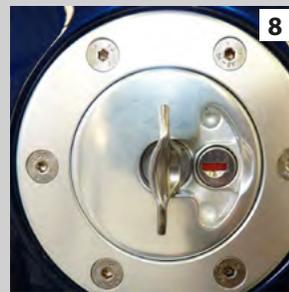
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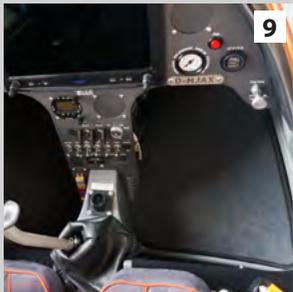
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7



8



9



10



11



12

**1. Fit-In Travel bag**  
Give you additional luggage volume without reducing cabin space

**2. Four point safety belt with turn-lock fastener**  
Optional in place of the four-point car-style harness

**3. iPad bracket**  
Fits iPad Mini/Air/Air2; We offer a multitude of GPS devices mounting

**4. Under-body landing light**  
Super-bright, giving clear runway visibility during night operation

**5. Wheel cover**  
The lightweight version for the front wheels

**6. Covers**  
Keep your aircraft clean and away from fiddling fingers with this all over cover

**7. Keel tube fin**  
Reduces the aircraft noise footprint and reduce propeller damage.

**8. Lockable fuel cap**  
Keeps your fuel safe

**9. Foot mat front**  
keep the cabin floor dry and clean

**10. Foot mat rear**  
keep the cabin floor dry and clean

**11. Tall Canopy**  
Extra headroom for the pilot (15 cm higher than standard)

**12. Heater System**  
Variable rate ventilation fan and cabin temperature control



## VERSATILITY

### Calidus Variants

#### RELIABLE PLATFORM FOR LAW ENFORCEMENT

The law enforcement platform of Calidus provides aerial support by day and by night. It is Night VFR certified in accordance with BCAR Section T and FAA Primary Category.

#### GYROMOTION PACKAGE ON CALIDUS

GyroMotion package turns a normal Calidus into a hybrid gyroplane. It uses a combustion engine for flying and electric energy on the road for driving. You can drive and fly in the same vehicle.

With plentiful energy available from operational auxiliary additional alternators, Police radio equipment can easily be powered for excellent communications, and still have power for cameras, live stream down-links, and other on-board systems.

GyroMotion combines the unique flying characteristics of a gyroplane with a road-based vehicle. GyroMotion gyroplanes take you from your home to your destination by air, by road, or any combination. You can fill up at your local fuel station on your way.



## LIFELONG PASSION AND CARE

Spare parts supply, continuous airworthiness and maintenance

To become the proud owner of a fabulous AutoGyro product is only the beginning of a long and happy relationship. The life cycle of an AutoGyro aircraft is expected to be more than 25 years.

Aside from the normal warranty provisions, AutoGyro embraces this long term responsibility with the following commitments:

**SPARE PARTS** We will maintain the supply of an appropriate range of spare parts suitable to maintain the AutoGyro fleet airworthiness for the foreseeable time in service, readily available via our global supply network.

**CONTINUOUS AIRWORTHINESS** We constantly monitor all reported incidents from our global fleet to find ways to improve our products. We responsibly publish these as Service Bulletins and Information Letters via our Technical Support portal, with open access so that all customers can be fully supported wherever they are located.

**MAINTENANCE** Correct and proper maintenance of your new aircraft is critical to safe operation, and we offer professional training by AutoGyro Instructors to maintenance personnel. Maintenance, service requirements and documentation are all found in the Technical Support portal.



## FLYING WITH CERTIFICATION & SAFETY COMPLIANCE

Fully certified and compliant to the highest safety requirements

Every country has national gyroplane Certifications and Regulations which strictly regulate the key requirements in terms of performance, structure and on-board systems, to give maximum flight safety. AutoGyro aircraft are designed and demonstrated to comply with the highest worldwide combination of these regulations.

AutoGyro aircraft comply with:



The German BUT (Bauvorschriften für Ultraleichte Tragschrauber). The DULV in Germany have audited the AutoGyro aircraft as part of each release to service in considerable detail, and each type carries a German Kennblatt approval.



UK BCAR Section T CAP643 Gyroplane Airworthiness Requirements, demonstrated by full UK Civil Aviation Authority audit and approval, and issuance of permits to fly for day and night VFR.



Additional UK Certification Approval inclusive of CRIE-01, enabling the issue of a UK ICAO compliant Standard Category Certificate of Airworthiness. Only AutoGyro aircraft have ever been shown to meet this stringent standard.



Federal Aviation Administration (FAA) of America type certificate. AutoGyro aircraft are available either in the kit built experimental category, or uniquely as factory-built, ready to fly. Only AutoGyro gyroplanes carry an FAA Certificate of Airworthiness within the Primary Category, and can be used for aerial work (except the carriage of goods and persons).



Australian Sport Rotorcraft Association approval.



CCAR-21 requirements of the Civil Aviation Administration of China. AutoGyro aircraft carry a CAAC Type Certificate (TC), and AutoGyro as a manufacturer has been audited by CAAC and awarded their coveted Production Certificate (PC).

AutoGyro aircraft are further certified in the following countries:

Austria, Brazil, Canada, Costa Rica, Czech, Dubai, France, Hungary, Iraq, Israel, Kenya, Mexico, Mongolia, Namibia, Netherlands, New Zealand, Norway, Philippines, Poland, Portugal, Qatar, Romania, Russia, Saudi Arabia, Slovakia, South Africa, Switzerland, Sweden, Thailand, Turkey, Uruguay



## GREEN CONCEPT

Low carbon footprints, more perspective for the future

Low fuel burn doesn't only mean the significant reduction of your operation cost. It leads directly to drastically lower exhaust emissions and a low carbon foot print. Thanks to the technological integration of the industry-leading aircraft engines, combined with AutoGyro advanced design concepts, AutoGyro gyroplanes are able

to achieve high performance with low fuel consumption. The computer controlled automatic lean engine setting works automatically to decrease the fuel flow to the engine at higher altitude or in cruise mode. It is the best trade-off of power performance and fuel consumption you can get.



Long Life Cycle

Unlike a car, an AutoGyro gyroplane has a long service life and expected to exceed 25 years. The extended long life cycle reduces the recycling and depreciation cost. It means the usage of a gyroplane is more sustainable and environmental friendly compared to many other industrial products and transportation vehicles.



Less Noise Emission

With an independently verified and incredibly low noise footprint, Autogyro aircraft quietly set a new standard. Less than 63 dB is at a level much below than the noise emission of most general aviation aircraft. For comparison, a vacuum cleaner is about 75 dB, while a power lawn mower is about 90 dB.



Green Concept

AutoGyro pursues green airborne solutions for industrial special missions and public service agencies. In 2015, AutoGyro developed the world's first-ever electrical gyroplane in cooperation with Bosch, supported by the EU. AutoGyro aircraft are used worldwide in law enforcement, aerial surveying and for agricultural purposes.



## TECHNICAL DATA\*

L x W x H (exclude rotor)	4.775 m x 1,73m x 2,8 m (15.66 ft x 5.67 ft x 9.1 ft)
Rotor length	8.4 m / 8.6 m / 8.8 m (27,3 ft / 27.95 ft / 28.6 ft)
Empty weight	290 kg (649 lbs)
MTOM (Max. Take-Off Mass)	560 kg (1232 lbs) 916 iS, 915 iS, 914 UL or 500kg (1100 lbs) 912 ULS
Engine	Rotax 916iS, 915iS, 914 UL or 912 ULS
Take-off distance, to clear 15m (45 ft) obstacle	365 m (1190 ft) (912 ULS, 500kg, HTC prop) 282 m (918 ft) (914 UL, 560kg, Ivoprop) 250 m (820 ft) (915 iS, 560 kg, Woodcomp) 220 m (722 ft) (916 iS, 560kg, Woodcomp)
Max. endurance <sup>1</sup>	up to 4,5 hours
Max. range <sup>2</sup>	up to 560 km (350 miles)
Cruise speed	90-185 km/h (55-110 mph)
Cruise 70% power setting, MTOM	140km/h (90 mph)
Max. speed (Vne)	225 km/h (140 mph, 120 KIAS)
Fuel capacity	74 L (19.5 US Gallons), 100 L (long range tank)
Comply with	BUT (Germany), Section T (UK), ASRA (Australia), CCAR-21 (China), USA Primary Category

\* Technical data can vary regarding country-specific legal requirements and is also depending on propeller/rotor/fuel/engine and aircraft configuration/equipment. Please always refer to the Pilot's Operating Handbook.

1. Typical aircraft configuration applies: 914UL engine, 1 pilot (80 kg), 40 l fuel, 2000 ft MSL
2. Typical aircraft configuration applies: 1 pilot (80 kg), max fuel, 2000 ft MSL

Figures, configurations and layouts shown in the brochure are subject to change without notice, and may differ depending on individual country aviation requirements. Terms and conditions of sale, including details of the 2 year warranty, are available via [auto-gyro.com](http://auto-gyro.com).



## AUTOGYRO AS A COMPANY

Made in Germany and for the globe

AutoGyro is the world leader in the innovation, production, and distribution of gyroplanes.

Production commenced in 2003, and since then AutoGyro has produced and delivered more than 3.000 aircraft across the globe. The company has the highest market share in the gyroplane industry.

Based in Hildesheim, Germany, all of the AutoGyro models are developed in-house and more than 90% of the aircraft parts are self-manufactured. These German engineered aircraft are fully certified by multiple national aviation authorities, and operate with standard category Certificates of Airworthiness.

With a sales and service network in over 40 countries, AutoGyro is well placed to support national or international flight requirements, wherever the aircraft is planned to operate.

### International Partners

Australia • Austria • Brazil • Bulgaria • Canada • China • Columbia • Costa Rica • Czech Republic • Denmark • Finland • France • Estonia  
 Hungary • India • Iraq • Ireland • Israel • Italy • Latvia • Lithuania • Mexico • Mongolia • Namibia • Netherlands • New Zealand  
 Norway • Philippines • Poland • Portugal • Qatar • Romania • Saudi Arabia • Serbia • Slovenia • South Africa • South Korea • Sweden  
 Switzerland • Thailand • Turkey • Ukraine • United Arab Emirates • United Kingdom • United States of America • Uruguay



# CALIDUS

PASSIONATE LIFESTYLE



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