


A CAR THAT FLIES, A PLANE THAT DRIVES

Inspired by nature, engineered by men and evolved over time, the PAL-V Liberty is a groundbreaking product that inaugurates the age of the flying car. The PAL-V Liberty is a marriage between safety and fun, designed to satisfy the most demanding customers.

Thanks to a number of patented technologies, the dimensions of the PAL-V Liberty do not exceed those of a regular car. It therefore blends perfectly with everyday road traffic, yet offers a new level of mobility.

Among many unique features, the PAL-V Liberty has two distinct attributes that set it apart from all other concepts. The first is that lift is created by a wind-powered rotor, making the PAL-V Liberty float in the air. Taking this gyroplane principle to the next level is the secret behind the safest and easiest flying vehicle on the market.

Another attribute of the PAL-V Liberty that adds to its uniqueness is the three-wheel design and the soft tilting motion in curves.
As a result, the PAL-V Liberty is a joy to drive and to fly, with a matchless drive and flight experience, as well as unequaled freedom of mobility.

This website is full of details about this revolutionary vehicle. Take a little time to absorb them, and you will soon be convinced that the PAL-V Liberty really is one of a kind.








THE SKY IS NO LONGER THE LIMIT
The PAL-V Liberty is without doubt the most exceptional vehicle on the market. It offers the best of both worlds – FlyDriving. Switch between drive and fly mode for the best option to reach your destination or to enjoy the journey. No need to leave your PAL-V Liberty parked at an airstrip. No need to return to pick it up again.

The first requirement for true dual mode flexibility is that the vehicle must be licensed to both fly and drive. In that regard, we have worked tirelessly to ensure that the PAL-V Liberty complies with existing flying and driving regulations in the vast majority of countries in the world. No relaxation of existing standards is required. If you're ready to go, so are we!

Seamless switching
A dual mode vehicle is only genuinely flexible if you can switch modes quickly and easily. The Liberty delivers this with a Semi-Automatic Conversion System (SACS) that takes only 3-5 minutes to switch from flying mode to driving mode and vice versa.

Moreover, you don't need to mess around with any tools. The mast folds and unfolds automatically. The cockpit configuration also changes automatically. When taking off, the pilot merely pulls the tail and unfolds the rotor blades and propeller. While driving the propeller is stowed in the body for protection. The blades are stowed on top to protect them. After landing, the pilot simply pushes the tail back in and folds the rotary blades and propeller.

Pre-flight check made easy
Before taking-off with any airplane a pre-flight check is required. Compared to a commercial flight, those 10-15 minutes are only a fraction of what it would take to board a plane.

And thanks to the Real Time Travel Calculator (RTTC) app, you can instantly know how much time you are saving compared to just driving or taking a plane. The RTTC takes into consideration parameters like the landing and take-off options, weight of passenger(s), weight of luggage and wind speed. It also calculates how many stops are needed and where those are in the case of a longer journey. It also recommends different travel scenarios.

INCREASE YOUR PRODUCTIVITY WHILE HAVING FUN
FlyDriving the PAL-V Liberty gets you faster to your business, your cottage or your client. Fly over mountains, rivers, lakes and traffic jams and drive on. Play more, get more things done and enjoy the ride at the same time.

DESIGNED FOR THOSE WHO VALUE TIME
Successful people hate to waste time. So we deliberately designed the PAL-V Liberty to free you from the ties of traffic. Now you are in control of your individual travel schedule. Plan your appointments when it suits you. No more airport parking hassles and no taxi, train, bus or rental car required after landing. A traffic jam? Just fly over it.

A traditional airplane or helicopter can usually fly rather fast and in a straight line. However, you still have to get to the airstrip and, perhaps, park. Once you've landed, you will have to transfer to a taxi or another form of transportation in order to reach your final destination. Furthermore, you have to guard your plane/helicopter and travel the same route back, picking up the vehicles you left behind.

With the PAL-V Liberty, on the other hand, you start your journey by leaving your garage, and arrive right in front of your final destination – having enjoyed a great flight in between. You have not left any vehicle behind and you can take a different route back. It's quicker, it's more reliable, more flexible and enjoyable, and it gives you a lot more certainty in terms of planning your journey and arrival time.

ENGINEERED TO BEAT THE WEATHER
Stranded at the airstrip due to bad weather? Not with the PAL-V Liberty. Outsmart the weather and drive to where visibility is fine and take off again. The PAL-V Liberty is the only aviation vehicle that seamlessly allows you to continue your journey. You'll be on time for your meeting or safely home without delay.

No need to call off or postpone your appointment because of weather. There are two advantages related to weather independence.

The first lies in safety during bad weather, when an airplane is short of options. The pilot either has to find the nearest airport, land and wait, or risk flying through the bad weather. "Get-home-itis" is the term in aviation for continuing to get home when you should not. This is a serious judgement error as it often leads to accidents. With a PAL-V Liberty you can simply decide to land and continue your journey safely, in driving mode.

The second benefit lies in planning certitude, relative to planes and helicopters. You know you will not be stranded at the airport while you wait for the weather to clear, so you can be sure of arriving or returning at a given time.

OFF-ROAD GETS A NEW MEANING
The PAL-V Liberty gives 'off-road' an entirely new meaning. It is perfect for those who like going to beautiful and remote places. Who needs roads when you can FlyDrive to your house in the country or to an island? Your favorite remote destination is no longer a challenge, but a joy to reach.

Natural obstacles, traffic jams or inadequate road-access to remote destinations, make it time consuming to reach them.

The PAL-V Liberty opens up so many more possibilities in terms of where you might want to live or base your company, or where it is feasible to buy a second home. Access for you and your family, or for customers and suppliers, is no longer such a challenge.

Of course, the PAL-V Liberty also opens up so many more leisure options in terms of playing golf, fishing, visiting friends, shopping and so much more.

And the journey will always be a wonderful and scenic experience.





IMPRESS WITHOUT SAYING A WORD
No other vehicle will express your sense of innovation like the PAL-V Liberty. Imagine picking up a guest with the PAL-V Liberty at the airport or station and FlyDriving to your office — simply unforgettable. You don't have to shout 'innovation.' Actions speak louder than words.

By the time the PAL-V Liberty is ready for delivery, it will be the first flying car on the market. The PAL-V Liberty is packed with innovation and is more innovative than any gyroplane on the market. The result of this innovation makes the PAL-V Liberty the safest, most fun to fly and drive vehicle on the market.

When you drive or fly a PAL-V you are sitting in a vehicle with unparalleled attention to many small details. A team of 50 people, 10 years of meticulous engineering and several patented inventions have produced a historical vehicle. Owning a PAL-V Liberty is a statement in its own. A declaration that you are part of the future.

THE PERFECT BLEND BETWEEN SAFETY AND FUN
The scenery and the landscape as viewed from the PAL-V Liberty are breathtaking. This is what awaits you when you fly one of the safest flying vehicles on the planet. We wanted to offer our customers unparalleled peace of mind by safely putting the fun back into flying. Flying the PAL-V Liberty will stimulate your senses like no other vehicle.

Stalling is a real fear for fixed-wing pilots and occurs when the speed of the airplane is too low, or take-off is too steep. It was in order to eliminate stalling that in 1923 Juan de la Cierva y Codorníu invented the gyroplane.

The key is that a gyroplane rotor is continuously in (self) autorotation by the wind. The rotor is always rotating like a windmill or a maple seed without being powered by an engine. Thus, even in the extremely unlikely situation that both engines of the PAL-V Liberty fail, you simply lower the nose gently to maintain your airspeed. You retain full control and land safely as if you were hanging from a parachute. This is very different from a helicopter where, if you lose engine power and don't react within seconds, your rotor will run out of RPM and you fall out of the sky! Gyroplanes are sometimes compared to helicopters but they are actually much easier and much safer to fly.

Two engines for twice the peace of mind
We wanted to raise the safety bar even higher so the PAL-V Liberty has two aviation certified engines to deliver the required power. In the unlikely event that one fails, the other engine is still operational. The PAL-V Liberty will have less power, but enough to fly to a very small landing spot in a very large area to land safely.

Landing can still be fully controlled with a low ground speed. Compared to a similar small fixed wing aircraft or helicopter the PAL-V has between 40 and 250 times more options for a safe landing when an engine fails. It is much safer than a helicopter in case of emergency, safer than a fixed wing plane and even safer than a standard gyroplane.

ADDICTIVE FLYING COMFORT
80% less affected by turbulence and self-stabilizing in gusts: You'll be eager to fly more than ever before. Even those who don't normally like flying will be happy to jump onboard. When other planes are grounded, you are still in the air.
The PAL-V Liberty's rotating blade design delivers advantages that reduce the experience of turbulence: a rotating wing is much less affected by turbulence than a fixed wing.

Another reason for the minimal turbulence experience is the hinge between the cabin and the wing. When the wing is affected by turbulence, the hinge neutralizes the effect.

In the event of a sudden gust of wind, a gyroplane is self-stabilizing.

All of this makes the PAL-V Liberty very pleasant and comfortable to fly. Therefore when it is too windy for fixed wing planes to fly (keeping them grounded), a gyroplane can continue to fly safely and comfortably for a long time.

Gyroplanes are also safer and easier to land with crosswind. In stronger crosswinds you can even land independently of the direction of the runway, due to the limited need for landing space and the low airspeed required (30km/h).

THE EASIEST WAY TO BECOME A PILOT
The gap between driving and flying has never been so small. Flying a PAL-V Liberty is the easiest way to become a pilot. Now it's time to fulfil your dream and add a pilot license to your driver's license. Fly to your destination, outsmart the traffic and enjoy a view you will never enjoy otherwise.

Nowadays the limited number of accidents that occur are almost all caused by human errors. To counter this we have introduced our Human Error Proactive Counteraction (HEPC) methodology. With HEPC we addressed most of the human errors known for gyroplanes, and made those errors hard or impossible to make.

This makes the PAL-V Liberty very safe but also easier to fly than other aircraft. It therefore is the easiest and safest way to become a pilot. This, in turn, enables more people to get a pilot license and enjoy FlyDriving a PAL-V Liberty.

LICENSED TO THRILL
The PAL-V Liberty we deliver to your doorstep complies with the existing regulations for both flying and driving. In other words, it is ready to be instantly enjoyed. Airborne or gliding through the winding roads just minutes later. Pure excitement without delay.

Any PAL-V Liberty that we deliver meets all the legal standards of the European Aviation Safety Agency and the Federal Aviation Administration (USA) for flight and the local road standards for driving.

In that regard, we have worked tirelessly to ensure that the PAL-V Liberty complies with existing flying and driving regulations in the vast majority of countries in the world. No relaxation of existing standards are required. If you're ready to go, so are we!





A JOY TO DRIVE, A JOY TO FLY
For a flying car to be a joy to drive and fly, it must be agile in both modes. It should be more than an airplane you can take home. With the PAL-V Liberty the fun starts when you experience the unique 'tilting sports car' feeling on twisting roads. Maneuvering in the air and swiftly getting around obstacles like a hummingbird will make you smile. Every journey with the PAL-V is a feast for your soul.

It's not enough to build a flying car that you can drive on the road. In fact there is nothing spectacular about a plane that drives – it's called taxiing. However to make a flying car that's street legal and fun both on the road and in the air is a real challenge that the PAL-V Liberty overcomes wonderfully.

On the road
With its 4m length, the PAL-V Liberty is comparable in length to any regular car – a Volkswagen Golf for instance. The PAL-V Liberty is also based on a three-wheeled design combined with Dynamic Curve Stabilizer (DCS) technology. This makes it the most agile flying car ever imagined.

In fact, it is even more agile than a normal car because the PAL-V Liberty leans into the curves and is able to maneuver on winding and urban roads giving a unique driving sensation and great joy.

In the air
Due to its compact size and the absence of a fixed wing, the PAL-V Liberty can turn quickly, enabling pilots to steer more precisely and easily. As well as being great fun, this also makes it easier to evade unexpected obstacles. In as little as 20 meters you can make a full turn and fly back, making it much safer to maneuver in tight areas like valleys.

PARK LITERALLY ANYWHERE
Nothing could be better than having a flying car you can park like any regular car. So we created the most compact flying car possible. Go to a meeting in the city and park anywhere including an indoor parking garage. No limits to where you want to go.

It may sound trivial, but the fact of parking is often overlooked when considering a dual mode vehicle. With its compact 4m length, 2m width and 1.7m height, you can park the PAL-V Liberty literally everywhere, even in a parking-garage with a low ceiling.

# SPECIFICATIONS



VIEW SPECS

DRIVE MODE

| | |
|---|---|
| Max Speed: | 160 km/h |
| Top speed acceleration (0-100 km/h): | <9 seconds |
| Engine power: | 100 hp |
| Fuel economy: | 7.6 l/100km |
| Range: | 1315 km |

FLIGHT MODE

| | |
|---|---|
| Economic cruise speed: | 140 km/h |
| High cruise speed (90% range): | 160 km/h |
| Maximum speed: | 180 km/h |
| Min speed for level flight: | 50 km/h |
| Engine power: | 200 hp |
| Maximum operating altitude: | 3500m |
| Useful load: | 246 kg |
| Take-off roll (MTOW, MSL): | 180m |
| Take-off distance (+ 15m obstacle clearance) (MTOW***, MSL****): | 330m |
| Landing roll distance: | 30m |
| Fuel economy: | 26 l/h |
| Max Range (with ½ hour reserve fuel*, MTOW): | 400 km |
| Max Range (with ½ hour reserve fuel, single person operation, MSL): | 500 km |
| Max endurance (with ½ hour reserve fuel, MTOW): | 4.3 hours |

* ½ hour reserve fuel is 100-150 km of fuel left for driving
*** Maximum Take-off Weight
**** Mean Sea Level

TECHNICAL SPECIFICATIONS

| | |
|---|---|
| Capacity: | 2 persons |
| Mass Empty: | 664 kg |
| Maximum Take-Off Weight (MTOW): | 910 kg |
| Fuel type: | Euro 95, Euro 98, E10 ** |
| Fuel capacity: | 100 l |
| Dimensions Drive-mode: | 4m L x 2m W x 1.7m H |
| Dimensions Flight-mode: | 6.1m L x 2m W x 3.2m H (Rotor diameter is 10.75m) |
| Maximum baggage load: | 20 kg |

** Unleaded automotive fuel, with max. 10% ethanol (E10), EN 228 specification, min RON 95 (min AKI 91)