

**CARS**  
*Praga*





# R1

Lightweight, Extreme downforce  
Full-carbon, High safety, Low running cost



*"It was a good feeling  
driving this car.  
I enjoyed it a lot."*

Sébastien Loeb



*"I was amazed  
by R1's agility"*

David Coulthard



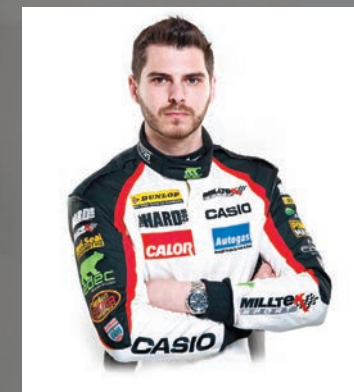
*"That was f\*\*\*ing  
amazing"*

Felix Baumgartner



*"I liked the sharpness  
of Praga R1. Its greatest  
feature is its chassis."*

Martin Prokop



*"It was a pleasure to be  
the first one to race the R1"*

Tom Onslow-Cole



## Full-carbon track car

The Praga R1 is a full-carbon track car designed around a composite monocoque, inspired by endurance prototypes.



#PragaR1



## Safety features

Praga R1 crash safety structure is composed of bespoke honeycomb carbon fibre monocoque, carbon/Kevlar strengthened flooring, front and rear crash boxes, and side mounted crumple zones. An independent test centre in Cranfield (UK) carried out a test of R1's monocoque according to FIA CN standard and the monocoque survived with absolutely no damage at all. Coupled with the racing standard six point seat belt, HANS system support, helmet side support, FIA approved fuel cell, polycarbonate windows, and an integrated fire extinguisher system, you'll never feel so safe in a race car.







**EVO**

“With a heart trying to beat its way out of your ribcage,  
you have to override your natural impulses and trust the aero”

HENRY CATCHPOLE, Praga R1 on Official EVO Magazine



## Technical specifications

965 x 4144 x 1800 mm Dimensions (H x L x W)

Renault Sport Formula 2010 2.0 Engine

4 / 16 Cylinder / Valves

Mid, longitudinally mounted Location

82.7 x 93 mm Bore / Stroke

1998 cm<sup>3</sup> Displacement

### **R1** Praga R1

592 kg Weight

210bhp @ 7250rpm Power

220Nm @ 4500rpm Torque

### **R1s** Praga R1S

592 kg Weight

235bhp @ 7250rpm Power

250Nm @ 5200rpm Torque

### **R1T EVO** Praga R1T

620 kg Weight

330bhp - 380bhp @ 6850rpm Power

370Nm - 410Nm @ 5000rpm Torque



# R1T EVO

## The evolution of Praga's lightweight racer.

Development of Praga's own turbo system in the R1T EVO allows for improved heat management, while boosting power and saving weight.



The new R1T EVO will offer adjustable power levels, allowing for easier handling in tricky condition and for amateur drivers. An optimised air intake allows for more airflow to the intercooler and integrated shark fin adds stability in high speed corners. The intercooler is more efficient and more than twice the size of the previous one. This allows the system to maintain air temperatures of around 55°C even through the hottest races." Otherwise its missing the point. This lower air charge temperature will maintain a higher power output to the wheels and a smoother delivery of torque. There is also a drop in water and oil temperatures. The volume that is pressurised by the turbo is now halved and therefore builds boost quicker reducing turbo lag and improving throttle response.

Praga has developed their own carbon fibre intake manifold weighing only 1.7kg, compared to the 8kg of the OEM Renault Sport intake manifold. Finally the new exhaust manifold uses a v-band connection for quicker and easier replacement when needed. Additionally Praga will offer new lightweight forged rims saving 8kg of unsprung mass over the standard rims.

During testing at Praga's home track, Slovakia ring, factory test driver, Ales Jirasak, recorded a new personal best lap time for Praga with 1:56.08 beating the old lap time of 1:58.40. Over a 2-minute lap the new Turbo system offers a 1.4 second improvement per lap.



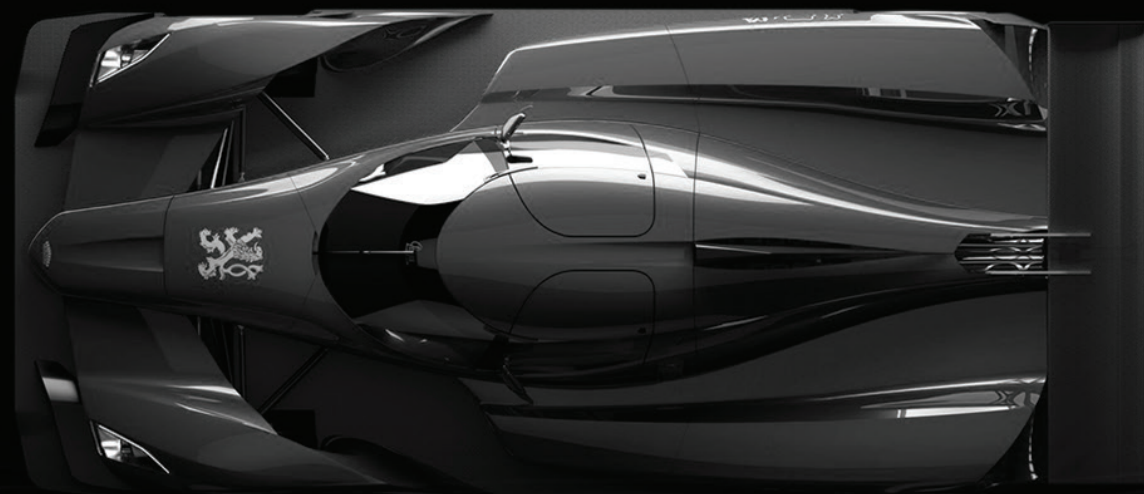
## Running costs

- Lightweight construction and suspension setup is optimized to enhance traction while minimising tyre and brake wear.
- Engine rebuild time of Praga R1 is 50 racing hours.
- The use of high quality parts from proven suppliers helps to reduce service costs.

Where others reach deep into their pockets to keep their engines running, the heart of your R1 will last you throughout the season.







## Extreme Aerodynamics

Teardrop-shaped R1 can generate downforce of up to 1,5x times its weight through its sophisticated aerodynamics. Enhanced traction and the overall capability of the car to go fast around the corners is what differentiate R1 from its competitors. The car can generate up to 3G of lateral force in corners.



For more information visit  
[www.pragaglobal.com](http://www.pragaglobal.com)





# R1R

COMING 2018

**The first  
road car created  
by Praga since 1947**

We are delighted to introduce the Praga R1R.  
It is the first road car created by Praga since 1947  
and it is here to follow up with the legendary history  
of Praga cars. The construction of the R1R is based  
on the successful race cars and is designed to provide  
the ultimate driving experience. Lighter than any  
production car, **safer than competitive race cars.**  
The R1R – Race car technology with license plates.





## The history of Praga

Praga cars were always known for their versatile construction, reliability and luxury. They were driven by doctors, business men, movie stars, soldiers, presidents and even a king. The Praga brand was unique for its ability to manufacture almost anything with an engine in it. Throughout history more than 110 years long, Praga produced countless of types of cars, trucks, buses, tractors, trains, motorbikes, boats, airplanes, helicopters and

even tanks. The cars were instant hit and they became so popular that to fulfil the market needs, other manufacturers throughout the Austro-Hungarian Empire were employed to produce them. Praga joined the push for unification which also led to introduction of the metric system throughout the country. By 1930's Praga had more than 70% share of all automobile sales in Czechoslovakia and was hugely popular abroad too. Regrettably,

soon after the end of Second World War, Praga was forced to concentrate its production on buses and trucks and the company stopped all automobile production. For nearly half a century, the Praga brand was synonymous with V3S trucks that had legendary capabilities, both on and off the road. Emerging after the fall of the Iron Curtain and the growth pains of the 1990's, Praga focused its most of its activities on motorsport. Soon

Praga motorcycles, race trucks, trial trucks and a worldwide support system emerged to support some of the best drivers and riders in the world. It did not take long for Praga cars to come back to life as well. And where else to start than straight into the competitive world of motorsport.

Soon Praga was producing ultra competitive go-karts followed by a new race car, the Praga R4S. Thanks to the success of the R4S, the Praga

R1 and R1R soon followed. Not content to stay grounded and to prove that there is no limit for the Praga brand, the company is now hard at work reviving their aircraft production line with a new model, The Praga Alfa.

Stay tuned for more upcoming projects from Praga.

[www.pragaglobal.com](http://www.pragaglobal.com)



Charon  
1907 - 1911



Alfa  
1913 - 1942



Air Baby  
1934 - 1946



Lady  
1935 - 1946



LT vz. 38  
1939 - 1942



Enduro  
1999 - 2004



RS4  
2012



Praga Alfa  
2016



Grand  
1912 - 1932



Piccolo  
1924 - 1941



Golden  
1935 - 1941



V3S  
1953 - 1985



Karts  
2011



R1  
2013



**KARTS**  
*Praga*



## It's the chassis that makes the difference!

Praga is one of the top karting brands in the industry. Our products are produced to the highest standards of quality and excellence. We employ some of the most experienced professionals in the field. Rigorous product development and testing ensures you a top-class kart, always at the forefront of innovation and advancement in the sport.



**Ø30MM**  
Tubular Frame



**50 KG**  
Chassis



**SPINDLES**



**Ø50X2X1030 MM**  
Axle





*Throughout it's more than 110 year history, Praga has made quite a spectacular range of vehicles.*

*Passenger cars, motorcycles, light trucks, buses, tractors, tanks, karts, race-cars, and even aircraft - all of them designed and developed in-house by Praga people, driven by passion for mobility.*

Although Praga presently only produces go-karts, road cars and racing cars, the company's portfolio will soon be expanding. Praga is reviving its aircraft production line with an exciting new model – The Praga Alfa or to give it its full name, the Praga Orbis Avia SM-92T(E). The Praga Alfa is a multi-purpose, single engine, high wing, all-metal turboprop aircraft with a fixed landing gear, built to EASA CS-23 and FAA FAR 23 standards and requirements. More importantly the Praga Alfa can operate with just one pilot (if required) and carry up to 7 passengers. Power is via a Walter M601 F turboprop (or alternatively a GE H80), mounted in the nose with three-blade, all-metal tractor-type AV-803 propeller.

The aircraft has been conceptually designed to satisfy the all the requirements for easy operation and maintenance, including line servicing in different and difficult climatic conditions ranging from the Arctic Circle

to the sands of the Sahara. The Praga Alfa doesn't need a paved runway for takeoff and landing, it can operate in any flat area as long as there are no obstacles and there is sufficient ground support. This aircraft can also be parked and stored in situ, without the need for a covered hanger.

A specially designed, high-quality, aerodynamic P-301 M-15 wing profile allows the aircraft to operate at a variety of different speeds. With its large control surfaces, the aircraft delivers a wide operational envelope giving the operator extended value, which is reflected in its user-friendliness and, above all, operational safety. The aircraft is equipped with large sliding side doors, which enables efficient operation of both cargo and passenger loading. Each customer can specify their own avionics package, from the simplest classic analogue variant all the way through advanced navigation and GPS options to a complete modern glass cockpit system.



[www.pragaglobal.com/praga-alfa](http://www.pragaglobal.com/praga-alfa)

**ALFA**



