

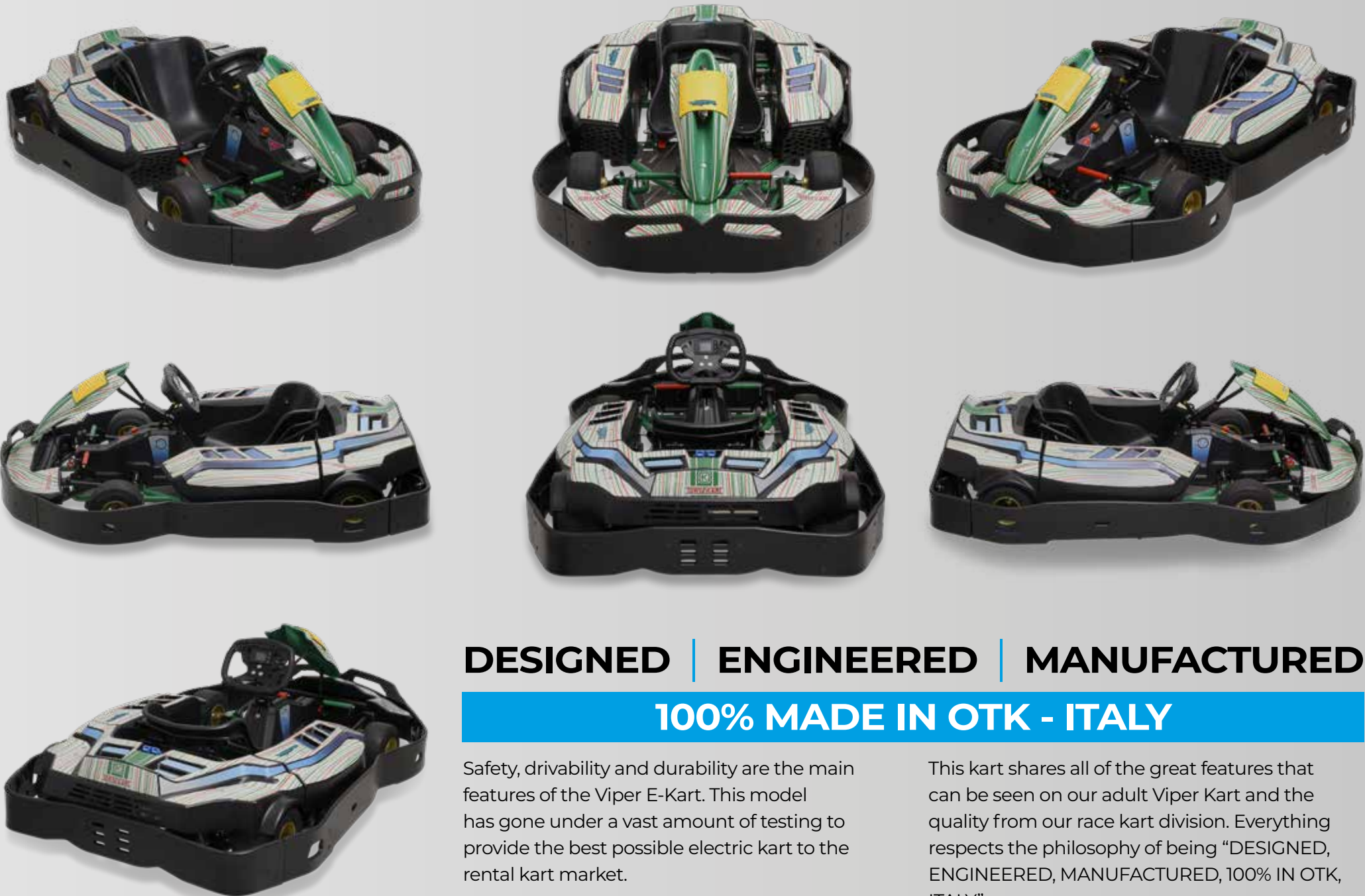
Viper E-Kart:
the OTK Kart Group's
Electric Rental Kart



Viper E-Kart: electrifying fun for all ages!

Viper E-Kart is not just a kart; it's a testament to OTK Kart Group's commitment to pushing the boundaries of performance, safety, and sustainability in karting. Get ready to experience the future of karting with the new Viper E-Kart.





DESIGNED | ENGINEERED | MANUFACTURED
100% MADE IN OTK - ITALY

Safety, drivability and durability are the main features of the Viper E-Kart. This model has gone under a vast amount of testing to provide the best possible electric kart to the rental kart market.

This kart shares all of the great features that can be seen on our adult Viper Kart and the quality from our race kart division. Everything respects the philosophy of being “DESIGNED, ENGINEERED, MANUFACTURED, 100% IN OTK, ITALY” .

E-POWER TRAIN

THE MOTOR The electric by OTK Kart Group

Viper E-Kart is equipped with an electric motor (brushless permanent magnet motor), developed and created specifically for karting, which guarantees a nominal power of 5.5 kW (peak of 12 kW) and an exceptional peak torque of 145 Nm at the wheels (45 Nm at the crankshaft).

Its low weight of approximately 197 kg allows the electric rental kart by OTK Kart Group to be the benchmark product in the kart rental sector, for performance and reliability.



Product Advantages

- Zero CO₂ emissions (and other gases harmful to humans and the environment) and noise emissions.
- Streamlining of bureaucratic procedures for obtaining authorizations relating to the opening (and ordinary management) of kart centres.
- Access (depending on country) to tax breaks and bonuses for grants sustainable start-ups.
- Reduced maintenance, thanks to the fewer moving mechanical parts which the karts are equipped with.

WEIGHT OPTIMIZATION

Batteries lasting over 1h, with optimized charging times

The electric motor of the Viper E-Kart is powered by 116 Ah NCM lithium batteries, a capacity at the top of the rental kart sector. This quality, together with the optimized weight of 197 kg, makes the Viper E-Kart the electric rental kart with the best “capacity/weight” ratio available on the market, 0.589 Ah/kg. This means that for every kilogram of weight, the kart provides almost 0.589 Ampere/hour of battery capacity. Concretely, Viper E-Kart offers the best energy storage efficiency and driving times of over an hour per charging cycle.

In detail

Regarding the charging station and the necessary timing:

- 7 kW three-phase chargers are required. Specifically supplied by OTK Kart Group, they communicate via CAN with the battery control unit, ensuring optimized charging times and greater longevity of the batteries themselves.
- The time ratio between charging and driving is 1 to 1. This means that 20 minutes of charging corresponds to approximately 20 minutes on the track.





POWER, DURABILITY AND... SAFETY

Cutting-edge protective equipment to protect your investment

Viper E-Kart has been designed to offer maximum safety and longevity. In fact, it boasts an IP64 classified electrical system which guarantees durability and resistance, to dust and water, and represents the highest level of protection offered in the rental electric kart market. Furthermore, Viper E-Kart has the most advanced kart monitoring tools, such as the vehicle control unit (VCU) and the battery management system (BMS). So as to allow all owners of rental kart tracks to always have the actual “health” status of their kart fleet under control. Thanks to these tools, OTK Kart Group offers, for each battery, a guarantee and continuous support regarding maintenance and technical assistance.

In detail

- The VCU offers several features, such as stop-on-ramp function and the ability to disable the accelerator pedal while charging or braking.
- The BMS provides real-time monitoring of battery status and error detection, with instant shutdown to protect the component.





The adoption of dynamic air intakes and the use of heat sinks to cool the battery packs has made it possible to avoid alternative and more critical temperature containment systems. For example, the use of electric fans can create several negative aspects: they are a source of noise, they consume electricity reducing the autonomy of the batteries, they increase the total weight of the kart, and they are an additional element prone to possibly failures and obliging a dedicated maintenance program. All aspects that the technical solution adopted by OTK Kart Group's R&D department excludes.



The ergonomic steering wheel (Ø 350 mm), for effortless control.

Steering wheel display to offer vital information and customization options, including RPM/boost gauges, battery percentage SOC when the kart is charging, company logos and control and diagnostic screens accessible only to the track manager.

Boost and reverse functions installed on the steering wheel.

SAFETY

The Viper E-Kart offers a cushioned steering column which minimizes the repercussions of any collisions on the upper limbs of the driver. There is also the option of installing a Roll-Bar complete with safety belts.

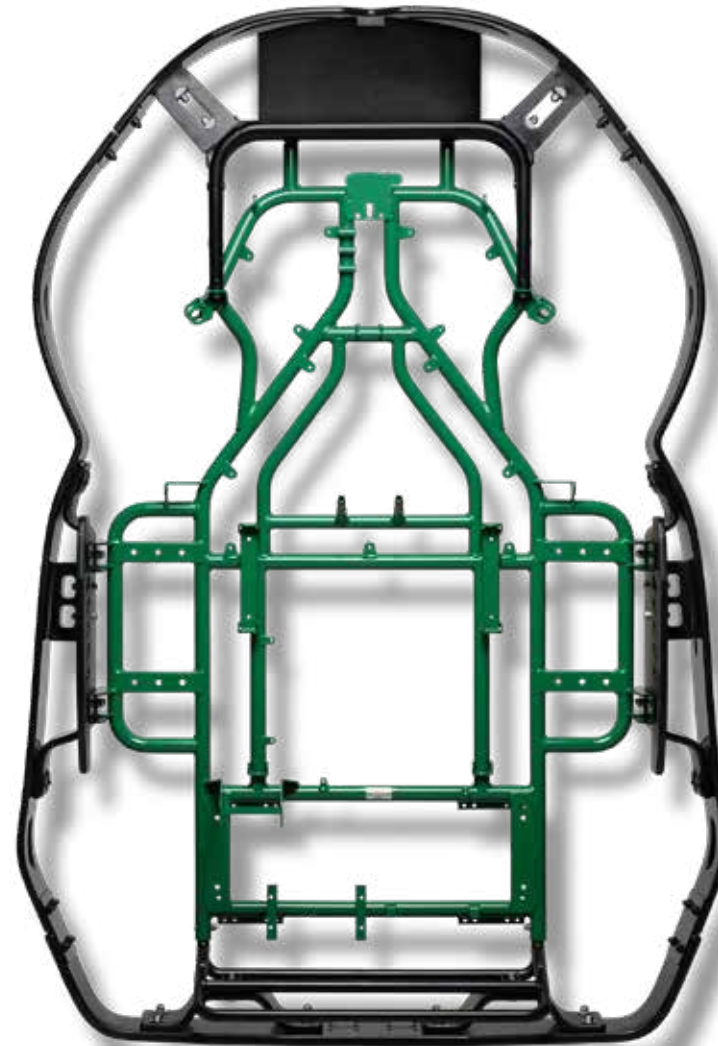
As far as driving comfort is concerned, the OTK Viper E-Kart has a quick control mechanism to adjust the pedals and the seat to cater for the different heights of drivers easily. The kart has been designed to offer maximum performance on both outdoor and indoor tracks, while maintaining driving pleasure and driver safety.





The cushioned steering column, with its guaranteed 5 cm controlled movement, allows energy to be dissipated in the event of a collision, thereby safeguarding the drivers upper limbs.

Optional option of a roll bar and seatbelt for an additional safety when operating the kart.



Viper E-Kart inherits the same robust safety features rigorously tested on all our rental karts. Witness the protective plastic perimeter band enveloping the chassis, shielding both driver and vital components. Plus, strategically placed polyurethane shock absorbers ensure driver and kart remain damage-free. Safety meets exhilaration!

Built For Business

Viper E-Kart is engineered to deliver adults an unparalleled driving experience. Designed for all sizes, it offers maximum pedal and seat adjustability, ensuring a perfect fit for every driver. Embark on your electric adventure with comfort and precision!





VIPER E-KART FEATURES





- **Eco-Friendly**

Viper E-Kart produce zero emissions, making it environmentally friendly and suitable for businesses focused on sustainability.

- **Low Operating Costs**

Viper E-Kart has lower maintenance and fuel costs compared to traditional gas-powered karts, resulting in cost savings for businesses.

- **Quiet Operation**

The Viper E-Kart is much quieter than its gas counterpart, allowing for a more pleasant customer experience and reduced noise pollution.

- **Instant Torque**

The Viper E-Kart's electric motor provides instant torque, offering quick acceleration and an exciting driving experience for customers.

- **Easy Maintenance**

Viper E-Kart has fewer moving parts and requires less maintenance than petrol-powered karts, reducing downtime and maintenance expenses.

- **Adjustable Speeds**

The kart can offer adjustable speed settings, making it suitable for a wide range of driver skill levels and ages.

- **Remote Control**

The Viper E-Kart comes with remote control capabilities, allowing track operators to manage kart speed and safety remotely.

- **Safety Features**

Viper E-Kart includes safety enhancements like optional seat belts, roll bars, and electronic speed limiters, ensuring the well-being of the customers.

- **Customisation Options**

This model can be customized with branding and other features to enhance the overall experience and promote your business.

- **Reduced Vibration**

Electric karts produce less vibration, contributing to a more comfortable and enjoyable ride for customers.

- **Diagnostics**

The Viper E-Kart systems offer diagnostic capabilities, enabling operators to identify and address issues quickly.

- **Regenerative Braking**

Electric karts have regenerative braking systems, which can help extend the battery life and improve overall efficiency.

- **Zero Emissions For Indoor Use**

Electric karts are ideal for indoor tracks as they produce no exhaust fumes, making them suitable for enclosed spaces.

SPECS



Technical Information:

- **Total Kart Weight:** 197 kg
- **Motor:** Brushless permanent magnet motor, with a nominal power of 5.5 kW and a peak power of 12 kW. Peak torque at the motor shaft maxes out at 45 Nm, while at the wheels, it reaches 145 Nm (limited depending on the map used).
- **Battery Details:** NCM lithium cells with a capacity of 116 Ah.
- **Driving Time:** The driving time depends on the selected map and circuit variables, but it is possible to achieve over 1 hour run time.
- **Chassis Bare Frame:** Crafted from chrome steel with a diameter of $\varnothing 32 \times 2.5$ mm.
- **Length:** 1.985 mm
- **Max width (rear):** 1.367 mm
- **Axle:** $\varnothing 40 \times 5$ mm
- **Brake Disc:** OTK VP01 self-ventilated, with a diameter of $\varnothing 200$ mm and a thickness of 18 mm.
- **Rear Brake Caliper:** OTK VP01 floating hydraulic system with 2 pistons and automatic compensation of brake pad consumption.
- **Stub Axles:** High-resistance 20 mm stub axles equipped with 4 bearings.
- **Steering Wheel:** OTK $\varnothing 350$ mm ergonomic steering wheel made from high-resistance polyurethane and steel.
- **Pedals:** Adjustable pedals with protection covers and a “cut-off” system for brake-accelerator.
- **Seat:** Black thermoformed plastic seat with adjustability with double locking system.
- **Bodywork:** Sleek black thermoformed plastic bodywork.
- **External Protections:** High-resistance thermoformed plastic with leaf spring for additional safety.
- **Shock Absorbers:** Polyurethane shock absorbers designed for high-energy absorption.

Standard Equipment:

- Front Light
- Rear Brake Light
- Belt Drive
- Electronic Anti-Double Pedal System
- Steering Wheel Display
- Steering Wheel-Mounted Boost and Reverse Functions
- De Haardt Xtra.CAN Transponder with remote speed functions

Options Available:

- Weight Ballast
- Roll Bar and Harness
- Customized Kart Graphics
- Front wheels cover
- Caster setting bush (+-2°)

Safety Features:

The Viper E-Kart is equipped with a Vehicle Control Unit (VCU) that boasts several safety features, including a stop-on-ramp function and the ability to disable the throttle pedal when charging or braking. The VCU communicates seamlessly with the motor, inverter, and batteries. In case of safety concerns, it can open the main switch to immediately halt the kart.

The batteries are equipped with a Battery Management System (BMS) that diligently monitors all cell parameters. Any detected errors prompt an error code for diagnosis, and in more critical safety scenarios, the BMS can open internal battery switches for added security.

viperkart.com



IMPORTANT
All images in this document are included for illustration purposes. Products are subject to changes and may show added options.

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