

Tomkart key features

- F1-Design
- Lithium Batteries
- Electric engine with 4 power levels
- Adaptable for body sizes from 130cm up to 190cm



Options

- Battery Charger
- Radio-controlled power limiting system
- Available in various colors

Technical specifications

- 12 layers polymer composite chassis
- 50 Volt electric engine with a maximum performance of 16Kw
- LiFePO₄-Batteries [50 V / 40 Ah / 30 kg / max. absorption 6kW / max. output 10kW / up to 10'000 charging cycles thanks to intelligent control]
- Maintenance-free belt drive
- 40mm axle
- Hydraulic brakes
- Bridgestone tires
- Plastic Bucket Seat
- Reinforced and adjustable stub axles
- Steel steering wheel
- 120 kg without batteries
- Adjustable electronic engine control:

The electronic engine control allows to define via a computer-interface 4 different power output levels. We recommend 3 forward and 1 reverse level for rental karts. The kart driver himself can change between forward and reverse driving by a switch in the kart cockpit. The track operator can change between the different forward power output levels by a key switcher at the back of the kart or with the optional radio-controller. We recommend a maximum performance of 3.7 kW or 5 HP for the highest engine power output level for rental karts.

FAQ

Why tomkart?

- The Tomkart weighs including Lithium-Batteries only 150 kg and they can be recharged very fast
- Due to the easily adjustable seat- and pedals- construction, Tomkart is ideal for both children and adults and fits to body sizes from 130 cm up to 190 cm.
- The Tomkart is suitable for all driving skills (incl. children) because of the adjustable engine control
- Because the tomkart has been constructed exclusively for electric operation!
- Tomkart is an outstanding swiss quality product.
- Only future-oriented technology is used in the Tomkart.

=> The tomkart is the perfect renting kart for children and adults!

Why electric karts?

- No exhaust emissions
- Low noise emissions
- High torque at low rpm
- High safety standards for customers and track operators
- Accepted by ecologically thinking customers as well as by public authorities

Why Lithium-Batteries?

- Little weight due to high energy density (70 Wh/kg)
- Very powerful due to high power density (700 W/kg)
- Fast charging due to constantly high charge current up to 120A
- High voltage stability
- Low heat development
- High amount of charging cycles

Why is the chassis based on polymers and composite substances?

The Tomkart chassis is elastic but stays inherently stable. A steel pipe chassis however will deform by use. The elastic Tomkart polymer composite chassis comes always back to the initial form.

How long can the tomkart drive without recharging the batteries and how fast can the batteries be recharged?

A Tomkart needs, in full rental use, about 1 Ah current per minute. With new batteries (40 Ah) it would be possible to drive by full power output about 30 minutes. But we recommend a driving time of 8 minutes to not overstrain the customers and to not completely discharge the batteries. The charging time of the batteries is about 50% shorter than the driving time as charging can be done with higher intensity of current than driving needs.

How long is the expected lifetime of the batteries?

The answer to this question is depending on various influencing factors like the batteries-charger or the karting track. On our rental kart tracks the batteries have a lifetime of more than 5'000 charging cycles.

How fast is the tomkart?

With our recommended settings for rental karts 55 km/h, with the maximum performance more than 100 km/h top-speed .



The El-Kart company

The El-Kart AG is a well established company in the swiss karting business.

The company is constructing electric vehicles since 20 years and operates since 15 years karting tracks and develops electric karts. All of this experience and knowledge has been brought into the new Tomkart, which has been developed and tested in over 2 years work on our karting tracks in Winterthur and in Spreitenbach. More informations about the activities of the El-Kart AG can be found on www.kart.ch.