BIG SIX – Electricat 600

A Solar Electric Inflatable Catamaran

Exploration, a watercraft, sleeping quarters, party time, green energy, living quarters, toy, and boat – all of this and more could define the Electricat 600, or the Big Six for short.

The Big Six inflatable catamaran with electric motor is a revolution on global markets. This invention by trendsetting company Hovercraft was found in combining several features for enjoyment and leisure into one product. An inflatable catamaran is the perfect solution for lovers of nature, ecology, and relaxing but active vacations. It's perfect for lakes, rivers, and tranquil bays and lagoons, as emphasized by Blaž Stepišnik, director and co-founder of Hovercraft, who gave us his first-hand experience in an interview.



Can the Big Six, which is 6 meters long and has solar panels on its roof, be transported by car?

BS: Sure. For the basic model, without the hard cockpit and console, you'll need to put your back seats down. Otherwise you'd need a trailer measuring 300 x 200 x 150 cm, which at the same time can serve as a garage, so it can be stored there all year, with no need to pay for a storage space or marina slip.



How much time and how many people does it take to ready the Big Six for the water?

BS: 2 people, 1 hour, all they need is a 4 kW inverter (comes optionally for €350) or a 220 V network. There are two pumps, one stronger at 2 kW and one weaker at 1 kW. The most time is needed if the watercraft isn't on a trailer and the components need to be transported individually. If it's on a trailer, then everything is easier, looking like the cartoon Sport Billy, as a huge aquatic shelter emerges from a tiny trailer.

When it's inflated, you just push it into the water and it's already almost floating, as the hulls make contact with the water while the boat is still on the trailer. Use a winch to get the boat out of the water, or just submerge the trailer a bit more, which is no problem in fresh water.



The right motor is from 1 to 6 kW. What is the power difference here and what level do you need for an unobstructed vessel, for instance on lakes or the mouths of rivers, where the current isn't so strong?

BS: A 1 kW motor is enough to get you going 7 km/h (4 knots), which for short trips and calm weather is more than enough. A more powerful, 3 kW motor makes things safer in more inclement weather, but then you need a stronger, heavier battery. With a 6 kW motor you can even tow a tube, banana, or SUP for brief periods, though of course this uses more energy.



There are solar panels on the roof. How much energy do they provide? Is it enough to power both the fridge and the electric motor?

BS: Three flexible panels from the Italian manufacturer Solbian provide about 500 W in the summer for most of the day. But they only weigh about 2 kg each! With that you can expect around 5 kWh daily if there's sun, and around 2 kWh if it isn't raining. This covers most of your needs for electricity, as long as you don't intend on going faster than the solar speed, or 5 km/h (3 knots). Solar power can take you more than 50 km per day! There's a mobile app to control your solar and electric systems where you can check the status and parameters of the 48-V system for the motor drive and the 12-V system that powers the inverter, which provides 220 V for all such consumers. The picture below shows a practical example, where you can see that the solar system provides 521 W, while consumption at



the same time is 480 W at 5.3 km/h. The range of 26.6 km is, of course, intended for the 3 kWh battery, which never runs out, so honestly the range is infinite.



How did preparations go for your several-day journey through the Krka River's discharge?

BS: Lake Prokljan has the characteristics of both a lake and the sea, meaning that we first have to register in Šibenik, which also sanctions watercraft to use Croatia's continental waterways. We found the perfect marina at a restaurant named *Saint Tropez*, where the local town Bilice asks for a symbolic donation for mooring at their almost new, small, but fully equipped marina. We opted to moor facing the bora winds, an important decision for such a light boat. We loaded a 40-liter refrigerator that uses approximately 0.5 kWh/day, clothes, and self-inflating mattresses, filled a water tank with 50 liters, which also has a built-in electric showerhead, chemical toilet, some food and drinks – of course keeping in mind how easy it is to access restaurants and shops, which are plentiful around the lake. We read what Lake Krka and its waterfalls had to offer and we started exploring. We went into each and every cove; some of them are overgrown with marsh reeds and feel very much like a lake, and others have such emerald waters that they feel like the sea. Of course we also went to Šibenik, where we were all the rage. People were even filming us from this big mega yacht, even broadcasting the clip on TV.



Describe how the "typical" day went?

BS: Of course, it's a bit strange at first when every boat sails up closer than you're used to out of curiosity, some even stop you, but eventually you become accustomed to the attention, which is much more positive than if you were driving a mega yacht. The kids in Bilice adopted us, too, asking what they did to earn the honor of riding with us. My answer was that they deserved it by being so good in school and that "an education leads to success", which is also the same mantra I imprint upon my own children (5, 10, 12 years old), who love the Big Six with all their hearts.



The first night we moored at a buoy a few hundred meters from a mega yacht, one that was lit up like a Christmas tree. We turned on the white anchor light on the roof and the LED light in the living quarters, ate dinner per request of the youngest "captain", so naturally Nutella and bread, mom and dad drank a double whiskey and we went ... not to sleep, but to the roof! There we laid on our towels and watched for shooting stars, using an app to map out the constellations. Magical, unforgettable, and family first!



Then, later, we put down the blinds, which are all on zippers and prevent moisture, wind, and even the night sky from creeping through, or provide shade during the day. We slept on self-inflating mattresses that are 80 mm high, cushioned with sheets, placed our favorite toys and pillows down, and slept like babies. We were awoken in the middle of the night by a fisherman, whose technique included tapping his pole against the hull to scare fish into his net. It was over quickly and we woke up to a brilliant morning, ate something on the wooden deck, which doubles as a table, and sailed off to the most beautiful lagoon, surrounded by marshes, pines, and rush.

The challenge of mooring in completely calm waters between a pier and a pipe becomes a game for kids, who don't want to leave the tasks to adults. Children can set up an inflatable ladder to the roof, doubling in function as a fence, walkway, SUP, and tow tube. The Big Six is honestly so easy to steer that kids love practicing boating under parental supervision.



Jumping in the water, fishing, SUPing... meanwhile my wife and I have a book in our hands, getting a nice tan until hunger strikes. Items we used every day were stored in mesh pockets on the craft's hull, while we dried out anything that was wet under the roof (standing height) on elastic cords. Otherwise the cockpit (optional) has another 1,000 liters of space, which is more than you can carry in the trunk of the biggest station wagon, and of course most equipment can stay there, obviating the need to annoyingly move stuff around during transport. We unmoor and head off to a nearby restaurant, where we moor up and order some delicious seafood.



In the meantime the weather turns sour, starting to get windy and rain. In just 3 minutes we put up our transparent windows and door, marveling at how quickly the weather changed.



We wanted some peace and quiet in the evening, so we set off for the other side of the lake, meeting a few locals who had come to the pier by tractor to go fishing. Of course no meeting occurs without someone filming us and without a lively conversation. They invited us for dinner and for a tour of the nearby church and castle ruins.



In fact, the locals welcomed us enthusiastically no matter where we went, cooking us fantastic meals and making true friendships. I often think that, without the Big Six, we would have just sat on the beach feeling sorry for ourselves, but this way we got to see tons of beaches and more than 60 km of coastline, meeting a whole bunch of people, from the head of the port authority, townspeople in Bilice, and schoolchildren to some of the friendliest locals ever.

The whole family goes on vacation. How do you plan an itinerary and choose spots to stop at?

BS: Lake Prokljan offers many "courses", and the main idea was to sail close to the shore, in the shade of a huge roof with all possible comforts of the living quarters (12 m2) typically offered by much larger vessels. "The goal is the way" has never been such a precise definition of sailing, the goal determined by where the family wants to swim, visit an exciting landmark, or order delicious lunch at a restaurant in a romantic cove... Even if you change your mind along the way and choose to sleep instead of in a hotel rather on the boat in the most idyllic cove, the change is functionally feasible, and a few croissants and pieces of strudel from a local bakery is more than enough for breakfast and dinner. Distances are generally unproblematic, as long as you have enough time. Along the way kids

can play, snack, sleep, watch cartoons – the electricity won't run out. Neither will space or shade, and plenty is left over for guests, too.

Where do you make your food and store your fresh water?

BS: Fresh water is the best from the tap, and best if its filtered (for chorine, limestone, pesticides) with a good filter and filled into 6-liter plastic jugs, which can then be emptied into the bigger 50-l tank, and from there into small bottles for drinking. Using the inverter and a 400 W portable stovetop, you can easily make some pasta or heat up leftovers. Even better is to order a proper meal at the local restaurant, and just eat breakfast and dinner on the boat. The floor, which is also a table, is 100 x 120 cm, more than enough for Spartan cooking and service.

What was the most fun thing on your vacation?

BS: The Big Six was designed for family vacations. Its roof is 3 meters above the water, its windows 1 meter, and the deck is 40 cm above, so that means 3 whole levels for kids to jump around on with no worries. Furthermore it has a special 200 l dry bag in the front, which isn't just useful inside, but also has artificial leather on the front side, turning it into a big couch for anyone who wants to dangle their toes in the water. Us adults enjoy ourselves, too, as we have more time for ourselves, as we're dragging the kids around on a proper toy, which is both a watercraft and a shelter at the same time. Technology aficionados will also find our solar system a nice little experiment in using solar energy to power entertaining and dynamic recreation.



For whom is the Big Six intended?

Bs: The Big Six means freedom, entertainment, space, and comfort, a quiet and ecological watercraft for the new generation of solar sailing. Those families are going to enjoy it who love the water but have no interest in competing, just being together and being close to the natural environment. Lakes and rivers are only accessible by electric watercraft, and the Big Six is that and so much more: a solar watercraft which doesn't need to be charged, making it independent and welcome anywhere. It's the shortest path to an unforgettable vacation on the water!

