

## Product Description H<sup>3</sup>

### MyFC's fuel cell charger - powerful charge without electricity

The Swedish fuel cell company MyFC has developed an innovative and patented fuel cell technology for recharging mobile phones and other portable electronics, called *FuelCellSticker™*. The recently launched product line, called H<sup>3</sup>, is based on this innovative fuel cell technology. FuelCellSticker is unique in several ways:

- MyFC's FuelCellSticker™ provides a fuel cell that is extremely thin (2.7 mm) and flexible , which allows it to be placed on small and curved surfaces.
- It has a powerful performance which also provides a high power density (600 mW / cubic centimeter).
- MyFC's unique production technology (roll to roll, high volume manufacturing process) makes it easy to mass produce the fuel cells in a cost effective way and sell it at a competitive price.

These factors make the MyFC chargers small, light, energy efficient, environmentally friendly at the same time as they give high value for the money.

### About the product line H3

The new product line H<sup>3</sup>, that is based on the Fuel Cell Sticker technology, was launched by MyFC in February 2010. H<sup>3</sup> presents a cost-efficient and environmentally friendly way to charge cell phones and other portable electronic devices for users who are outside civilization, far from electricity and power.

The H3 charger is a "portion charger", which means that you add a portion of fuel to the chargers fuel chamber, which is filled with water. The fuel consists only of natural substances and minerals. When the fuel reacts with the water, hydrogen gas is produced, which is transformed into electrical power in the power cell. This power charges the electronic device. It is an environmentally friendly technology, since the used fuel is harmless for the environment and the fuel cell generates electricity from hydrogen gas, with water vapour as the only by-product.

The H3 charger can also be used as a regular travel charger, thanks to the internal battery that allows recharging without activating the fuel cells. The products of the H3 product line consists of two main products, H3 Adventurer and H3 Off Grid.

### H3 Adventurer

H3 Adventurer is designed for users who want to use a cell phone, mp3-player, radio communications devices or other portable electronic devices outdoors - for example on holiday on the boat, the hunting trip or other outdoor adventures. H3 is resistant to hard outdoors conditions like cold and rain, and is easy to carry around, making it particularly suited for travel and outdoor activities.

MyFC H3 Adventurer is a cordless charger that is easy to carry around, which means you can recharge mobile electronic devices at any time when you are outdoors and far from a power outlet.

The market for outdoor equipment is growing at record speed as a result of the worldwide population is growing more and more interested in both outdoors adventures, health and travelling, at the same time as

the need to have permanent access to advanced technology, such as GPS and Internet access, is growing. A couple of factors that are evidence of this rapid development:

- Swedish outdoor trade organization Svenskt Friluftsliv, that includes Swedish organizations for skiing, climbing and biking etc, is growing rapidly and currently has about 1.7 million members.
- According to a report by the U.S. Outdoor Foundation, they doubled over last year's figures for the number of people that are mountain biking and doing backpacking or cross-training.  
These two groups often use GPS receivers, mobile phones or other equipment to determine the position and communicate with others when travelling.

H3 Adventurer has a micro-USB connector, meaning you can charge all mobile phones and other electronics equipment, regardless of brand, which is micro-USB compatible. There are also adapters that make it compatible with mobile phones that do not support micro-USB.

### **H3 Off Grid**

H3 Off Grid is designed to provide a flexible and cost-effective alternative to recharge mobile phones for users in countries where there is no access to electricity or places to recharge your mobile phone. Often these are countries in Asia, Africa or South America where the infrastructure can make it difficult to get continuous access to electricity to recharge electronic devices. The market potential in these countries is enormous. Statistics from a report recently published by the organization GSMA:

- Approximately 500 million people worldwide have a cell phone but no access to electricity, and that figure is increasing quickly as the price on mobile phones in developing countries is dropping, while the supply of electricity continues to be a shortage.
- Operator tests show that a charging solution for locations without electricity can increase ARPU (Average Revenue Per User) with 10-14%. This means about 2.3 billion U.S. dollars for mobile operators.
- 60 percent of mobile operators have expressed interest in investing more in developing countries.
- Developing countries currently consist of 219 countries / territories and have 750 mobile networks, a figure that is growing as the operators' invest more over time.

### **Features and capabilities:**

The features and capabilities of the H3 Adventurer and H3 Off the Grid showed below as they look today, these will be further adapted for each market in the future:

### **Charger Features:**

- Charges a wide range of electronic devices, including mobile phones
- Also serves as an efficient, bright flashlight.
- Easy to use. Using water activated fuel supplied in disposable containers.
- Has a USB connector (includes a USB adapter plug)
- Rugged, durable construction. Withstands rain, heat and cold.
- Compact and portable. Just the right size and easy to carry.

- Ergonomic. Easy to hold in your hand.
- Environmentally friendly using clean technologies. The fuel cell generates electricity from hydrogen. The only residue is water vapor. The remaining fuel is harmless to the environment.

**Capabilities charger:**

Power Output: Sub-watts - 3 watts of energy per unit: 2 Wh

Charging time: 1 - 1.5 hours (which gives 2 WH)

Start Time: <10 sec.

Lifetime: 1500 hours, 1000 Start / Stop Cycles

Ports: USB micro / Standard USB Adapter

Internal Battery: 3.7 Wh

Weight without fuel: 105g

Weight, fuel capsule: 4g