# The New Age Of

# **Portable Fuel Cells**

GaltTec makes small and powerful electric power sources for portable devices using our proprietary fuel cell technology.

## **GaltTec 1kW fuel cell Electric power source**

We at GaltTec have developed a first-of-its-kind portable fuel cell perfect for powering transportation from drones to trains or providing off the grid power generation.

We provide 1 kW modules that can easily be combined into more powerful systems.



**Short startup time.** While other similar fuel cells take almost an hour to achieve working conditions, this 1 kW system requires just 1 minute to turn on and start energy production.

Physical resistance. The miniaturized technology provides radical improvement in mechanical stability. The building blocks inside withstand up to 1000 atm pressure and a fall of several meters.

Low mass and small dimensions. GaltTec's core technology yields the most compact fuel cell systems. These fuel cells provide the same power at 6x smaller volume and 5x smaller weight compared to batteries.

**Safety.** The utilization of miniature components in our systems ensures higher user safety.



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**Fuel Cell type:** microtubular solid oxide fuel cell

#### **Performance**

Power output	1 kW
(r	ange 0.01-1 kW)
voltage	48 V
current	20 A
Power generation eff	ficiency 65 %
Fuel utilization	80 %

#### **Operation parameters**

Operating	-20 60 °C
temperature range	
Cell temperature range	700 °C
Exhaust gas temperature	35 °C
Noise Level	34 dB
Lifetime	2 years or
!	5000 hours
Start-up time	1 min

### **Other parameters**

Outer dimensions	200×70×70 mm
Mass	1.5 kg
Fuel	Hydrogen