

# ULTRA MINIATURIZED RECHARGEABLE MICRO BATTERY FOR MEDICAL DEVICES

Let's power digital health together! injectpower delivers an innovative, safe, rechargeable, high density and highly reliable solid-state micro-battery technology.

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#### WHAT IS INJECTPOWER?

The main question facing the medical community is: how to minimize the size of an autonomous implant while ensuring adequate energy density for continuous long-term operation?

Injectpower answers this unmet need with an innovative safe, rechargeable and highly reliable solid-state micro-battery technology. It offers an unprecedented high-energy density solution on an ultra-thin substrate.

Our technology is supported by more than 16 years of development from the leading French R&D institute CEA-Leti.

Based on an optimum power management driven by the application that ensures an extended lifetime for continuous monitoring, the injectpower micro-battery perfectly answers medical device requirements.

#### **DEMO @CES 2023**

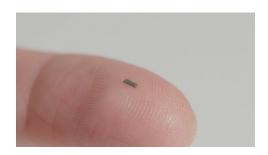
We will present one of the smallest and high energy density microbattery worldwide, dedicated to powering implantable medical sensors for intra-ocular pressure measurement (glaucoma monitoring) and intra- cranial pressure measurement (chronic neurological diseases) as a demonstrator.



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#### **WHAT'S NEW?**

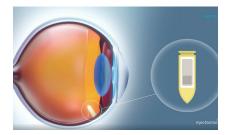
Injectpower solution is the first rechargeable battery at these miniaturization and integration levels worldwide.

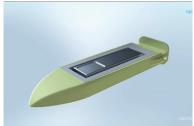


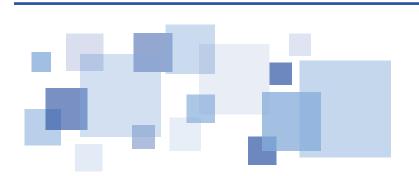
### **SCIENCE FOR A BETTER FUTURE**

Thanks to its miniaturization and energy density, injectpower solution will change the lives of a large number of patients by enabling for instance the implantation of measuring devices for better monitoring of chronic diseases.

We enable autonomous functionality and better miniaturization for new generation of implantable medical devices that will deliver clinically actionable data unavailable so far, to progress on prevention, improving therapy effectiveness and quality of life of patients.







#### INTERESTED IN THIS TECHNOLOGY?

Philippe ANDREUCCI, CEO philippe.andreucci@injectpwr.com

#### **APPLICATIONS**

# INTRAOCULAR PRESSURE MONITORING

injectpower energy solution is a key enabler for remote Intra Ocular Pressure monitoring to tackle the glaucoma challenge affecting 80 million people worldwide as one of the principal causes of vision loss.

#### **NEUROSURGERY**

Our ultra-thin micro battery solution will enable real-time autonomous and continuous monitoring for better understanding and treatment of chronic diseases such as hydrocephalus.

## **KEY FIGURES**

- Volume production scalability above 1 million microbatteries/year on semiconductor-like manufacturing line
- More than 10 years lifetime & more than 1000 cycles
- Energy density 10 x higher than existing products at such scale
- 10 x thinner



#### **WHAT'S NEXT?**

Injectpower delivers micro- battery for American medtech company injectsense, designed specifically for iOP-Connect™, an highly integrated intraocular pressure monitoring device that addresses glaucoma therapy management needs. We are also manufacturing solution to power intracranial pressure monitoring device dedicated to neurosurgery applications. Higher capacity microbattery component will be available for neurostimulation and cardiovascular applications.



