

Fast Sense

HYDROGEN AND METHANE GAS ANALYSIS ON A CHIP

We miniaturize gas sensors for the energy sector. Energy grids, including distributors and transmission lines, must accurately quantify hydrogen in their pipelines for safety, billing, and emission control. The Fast Sense microchip enhances instruments with capabilities for hydrogen quantification, enabling leak detection, flow meter correction, energy storage, redelivery, and compression. Customers can collect and consolidate data by embedding Fast Sense in the tightest locations within the harshest environments. R&D verticals span mobility, healthcare, industrial plants, and the food and beverage industry.

COMMODITIZING GAS SENSORS FOR THE ENERGY MARKET

Fast Sense's miniaturized gas sensors and micrometers can help manage energy distribution and consumption for both our customers and their clients. Their accurate real-time analysis enables efficient monitoring and maintenance of operating assets, ensuring optimal performance and safety for these critical components.

How? We print them. Disrupting conventional methods of fabrication, our solution reduces CAPEX by approximately 70%, avoiding the need for expensive analyzers, gas leak detection units, large metering systems, or inaccurate portable and single-field mount instruments.

OUR MAIN FEATURES

- ✓ Provides accurate analysis of hydrogen in natural gaseous environments
- ✓ Available with built-in flow & temp readings for high-pressure situations
- ✓ Features an IoT network mesh of sensors at multiple sampling points
- ✓ Connects through LoRaWAN™ or NB-IoT for real-time monitoring
- ✓ Extremely low power consumption
- ✓ Supports HART protocol
- ✓ Operates in hostile and explosive environments
- ✓ Miniature and embeddable design

THE STORY SO FAR....

Collaboration with utility company Engie SA to deliver 10 units and a pre feasibility study completed for SNAM grid operators. Patent span out off BIU nano energy centre. The company has received funding from IIA and NetZero.

In addition, software and an algorithm has been developed to facilitate the transmission of interoperable data within Fast Sense's cloud environment.

FURTHER DEVELOPMENT

Fast Sense aims to finalize a fully developed working prototype by:

- Developing the chip, instrument, and API elements of the system.
- Expanding market fit to include semiconductor and integrated circuit companies.
- Deploying 5 pilot environments for hydrogen gas field testing.
- Expanding sensitivity to include carbon dioxide, oxygen, and nitrous oxide for applications in cold supply storage, mobility, and healthcare.
- Obtaining ATEX Zone 1 & 2 explosion-proof certification.
- Enhancing the security of the platform.

JOINT VENTURE PARTNER

Seeking partners who, apart from advancing the required capital, will bring significant added value to the project. This may be through providing:

- Access to its existing network
- Development and testing facilities



STAGE: Pre Revenue
SEEKING: Seed Capital | Corporate Partner
MARKET: Gas distribution operators, utility companies and plant operators
WEBSITE: www.fast-sense.com

AWARDS:

- Winner: SNAM corporate Hyaccelerator
- Winner: Petro Fiorentini metering
- Finalist: LG Chemicals & Electronics
- First plant POC 2021 with Northern Gas



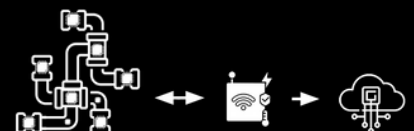
DAVID P. SUTER
CEO - Technologist 15 years innovative leadership, strategic biz dev redefine industry standards. TechCrunch finalist.



DR MELINA ZYSLER
CTO - Ph.D. Hydrogen sensing: Synthesis of layered 2H-MoSe2 nanosheets for supercapacitor electrode material



PROF. DAVID ZITOUN
Head of the Department of Chemistry Bar-Ilan Un. Materials scientist & Member of the Energy Center.



Reliable, accurate & miniature embeddable sensors on a chip (end nodes)

Management Cluster Gateway (LoRaWan/5G)

Cloud-based optimized real time data (API end points)

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