

# PORTRAIT OF A LEADING BATTERY SUPPLIER



**T**adiran lithium batteries have been used by leading electricity meter manufacturers since the early 1980s and, in particular, since the early 1990s as a power source for electronic gas meters.

The company's battery range matches the fundamental demands of the industry with applications ranging from backup for memory and real time clock, to 20 years of stand-alone power for GSM communication modules. Additional characteristics of Tadiran batteries include:

- Tadiran's lithium/thionyl chloride technology is especially suited where low power is required over a long period of time.
- Some smart electricity meters need a rechargeable battery in order to maintain communication functions during a power failure. Tadiran's lithium-ion batteries are ideally suited for this application.

*The company's battery range matches the fundamental demands of the industry.*

The need for high pulse currents combined with long-term usage drove Tadiran's R&D team to develop the PulsesPlus technology which was introduced in 2000. It combines the primary lithium battery with a hybrid layer capacitor of size 10 or 15 in diameter, providing a wide range of applications to meet the customer's demands. Driven by constant R&D efforts, this technology has been pushed further in order to increase power capability

in a given form factor. In the future Tadiran's new hybrid layer capacitor families will enable customers to operate demanding pulse loads with even smaller and more cost-effective elements. This makes Tadiran's PulsesPlus battery the best choice where radio modules or GSM modules need to be powered for between 10 and 20 years.

Tadiran Limited was established in 1963 near Tel Aviv, Israel. Right from the beginning the company has served international markets with top-of-the-line battery technologies such as lithium sulphur dioxide, silver-zinc and lithium thionyl chloride. Tadiran has a subsidiary in Bűdingen, Germany, founded in 1984. From the early days there was a separate production line established in Germany in order to serve the European market.

All products are developed by Tadiran's own R&D department. Today a wide range of high quality lithium cells is produced, from the smallest size of 0.5 Ah up to the largest size of 35 Ah. All products are designed to work in severe environmental conditions (-40 °C to +85 °C) for 10 years or more. Tadiran's batteries are manufactured on an

automated production line to world-class standards, utilising the latest techniques and quality assurance procedures, meeting and exceeding the most demanding application requirements.

The company's customer base includes some of the world's major brands in various industrial markets and the major customers are market leaders in their fields. These customers use Tadiran's products for smart metering and additionally for a wide variety of applications such as electronic toll tags, tyre tags, wireless security systems (PIR), asset tracking, sonar buoys, medical devices, business machines, animal tracking, law enforcement, military applications, security/emergencies, telecommunications and e-calls in cars.

To each of them Tadiran offers extensive and professional collaboration during the design-in phase. This ensures a perfectly fitted battery solution in, as Tadiran calls it, "the heart of your device". **MI**



**ABOUT THE AUTHOR**

Marc Henn studied mechatronics engineering near Frankfurt/Main and holds a master's degree in business administration. He joined Tadiran as manager of application engineering in 2016.

**ABOUT THE COMPANY**

Tadiran Batteries is a leader in the development of lithium batteries for industrial use. Tadiran Batteries are suitable where utility meters require a single long term stand-alone power source even if it has to supply high pulse currents for a GSM module.