

Electronics from Swabia in the Middle Kingdom

VARTA Microbattery presents energy solution for wearables and an in-car emergency call system at the Electronica China

The Electronica China will be held in Shanghai from 20 to 22 March 2019. In the New International Expo Center, Hall E5, stand 5756 at the German Pavilion, VARTA Microbattery will present its battery solutions for a wide range of different applications. A high-power, flat nickel-metal hydride cell, the V550HRA, will be on display at the stand. VARTA Microbattery has developed the particularly robust, durable cell specifically for the needs of the car industry, and in particular for emergency call systems and vehicle tracking for e-call applications. Here, VARTA Microbattery is offering a solution designed to meet the latest Chinese standards, which require all electric vehicles to be equipped with vehicle tracking devices.

If a car is involved in an accident, it automatically transmits information regarding the position of the car and the extent of the damage, and enables the passengers to speak to an emergency call centre. The chances of rescue and of reducing the level of damage are significantly increased. The standards for the emergency call system and its energy supply are therefore high. The combination of the GPS and GSM system and the necessity of recording sensor data from different positions in the vehicle requires an independent system with a high-power battery that can work reliably in the rough automotive environment over an extended temperature range. The battery must be robust and available at all times. The new VARTA cell covers an extraordinarily broad temperature range: from -30 degrees Celsius to +85 degrees Celsius. The cells are produced in Germany.

VARTA Microbattery will also be showing Lithium-Ion coin cells from the CoinPower series for the first time, which are designed for use in the next generation of car keys. They have a very high energy requirement due to the integrated display, among other things. Other areas of application for the CoinPower cells are headsets or fitness trackers, for example. The cylindrical form factor and high energy density of the CoinPower series make these batteries ideal for use in the wearables, automotive and medical segments. Rapid recharging, high resilience and a sturdy design round out the profile of these cells. To date, the CoinPower series has generated many patents, including the i-Lock system, which together with the circular shape enables an energy density up to 30 percent greater than comparable batteries on the market. "We are continually working to miniaturize our cells, and this enables the manufacturers to design ever smaller and flatter devices," says Philipp Miehl, General Manager OEM at VARTA Microbattery GmbH.