

Design Study

Smart Pill

Gas Generating Cell



Smart Pill

For portable drug delivery applications such as smart pills where an easy dosing of drugs is needed, where a movement by mechanical force is required or some pressure needs to be built up VARTA's small Gas Generating Cells are a perfect solution.

Product challenge

Our hydrogen gas generating cells are safe, compact, portable, easy to handle and easy to control. Only a resistor is necessary to activate the hydrogen production, without any additional power. The gas output can also be controlled for short, medium or long-term use.

For more information, please visit our website: www.varta-ag.com/en/industry/product-solutions/hydrogen

Technical solution V 40 H2 MF (24696)





CHARACTERISTICS	V 40 H2 MF (24696)
H2 Gas Output	45 ml (ccm)
Dimensions	7.8 mm diameter 5.5 mm height
Activation	Only a load resistor needed (no battery)
Operating temperature	0 °C up to 50°C
Fields	 For intelligent medical packaging For easy short, medium or long-term drug delivery

Gas Generating Cell

The Gas Generating Cells are ideal for innovative short-term or long-term dosing or packaging applications. Depending on the resistor the gas output can be controlled for short-term use up to long-term use. The gas pressure is used to transport liquids, gels, pastes or granules or for mobile and self sufficient analysis and sensor systems. The Gas Generating Cells are made in Germany to ensure a maximum production accuracy.

- Mechanical energy reservoir and gas pressure source
- Rate of H2 gas volume generated is proportional to discharge current
- Gas pressure can be used to transport liquids, gels, pastes or granules
- Ultrapure Hydrogen (for analytics, sensing, leakage detection, ...)
- Over 25 years approved and reliable high quality GGCell production
- Made in Germany