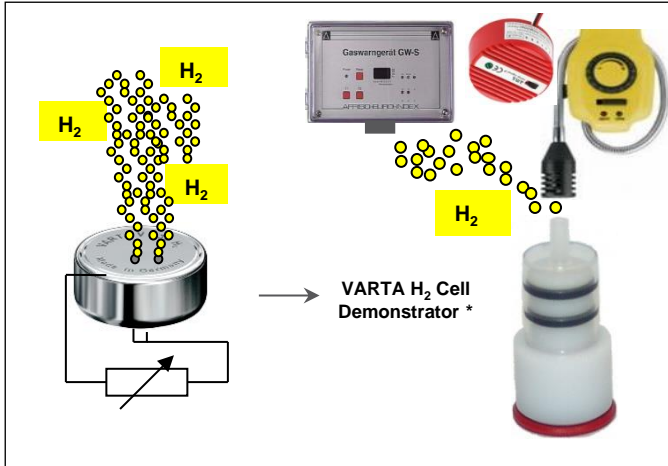


Gas - Detectors, - Analyzers, Indicators, Hydrogen Sensors

Application Note



Test & Calibration of Gas Detectors, Hydrogen Sensors

Gas detectors, gas analysers, gas indicators, leakage detection devices or hydrogen sensors need to be tested & calibrated regularly.

For such fixed or hand held devices a safe, easy to handle and portable hydrogen source is necessary.

Ultrapure Hydrogen from VARTA Microbattery

VARTA offers two products 1/V 150 H2 MF (24690101501) and 2/V 150 H2 MF SK BE (24690302501) which easily generate 150 cc or 300 cc ultrapure hydrogen. So an innovative solution with handling and economical advantages for your end-customers is possible.

Technical Solution

A test and calibration unit with hydrogen gas generating cells from VARTA Microbattery. Safe, compact, portable, easy to handle and easy to control. Only a resistor is necessary to activate the hydrogen production, without any additional power source.



Characteristics	VARTA H ₂ Cell V 150 H2 MF
Hydrogen Gas Output	130 – 150 ml ultrapure H ₂
Dimensions / Weight	D = 11.60 mm, H = 5.50 mm W = 1.65 g
Capacity Retention	> 90%, after 12 months storage at 20°C
Operating Temperature Range	0°C up to + 50°C (Discharge)
Expandable	300 ml or ½ litre hydrogen (with 2, 3, .. or more cell assembly)

VARTA H₂ Cells – for innovative short-term or long-term applications

Depending on the resistor the hydrogen gas output can be controlled. E.g. for short-term use (within minutes) up to long-term use (weeks, months, up to a year). From this small, safe and pressure-free H₂ “gas bottles”, in the volume size of only 0.5 ml you can get 250 – 300 times higher volume up to 150 ml.

- Safe & pressure-free hydrogen storage
- Easy controllable hydrogen (H₂) delivery (continuous or intermittent)
- Ultrapure hydrogen
- Hydrogen amount flexible & expandable (by 2, 3, ... or more cell assemblies)
- Energy independent portable system
- Operation over a wide temperature range
- Long shelf life
- Unique customer-binding solutions possible
- Economical & handling advantages
- Made in Germany