

Battery for Automatic Pipette

Application Note



Battery for Automatic Pipette Systems

Pipette and other applications with **multiple short-time usages** require stable and robust batteries that allow usage of the system during one working day and fully recharge during the night. This requires robust, stable and maintenance free batteries for multiple **motor driven** operations at aseptic hospital environment.

Battery challenge

The main challenges for this battery are the reliable operation, leakage free consistency in performance, several years of lifetime in daily use, reliability, easy charging, and low service effort. Proven generation of Ni-MH batteries specially featured for secure operation in a hospital surrounding with no stress to the battery due to superior cell construction, while the patented GCE electrode design gives high overcharge stability for secure charging.

Technical solution

The V 150 H cell with a capacity of 150 mAh out of the robust family of Ni-MH button cells, is specially designed for continuous use in extended hospital conditions by patented GCE Electrode and reliable sealing construction.



Characteristics	3/V 150 H (resp. 4/V 150 H)
Voltage level	3.6 V (4.8 V or other voltages possible)
Cont. discharge current	280 mA
Typ. Capacity	150 mAh
Discharge Temperature range	-20°C to +65°C
Overcharge capability	0,45 mA continuous at 20°C for 6 years
Weight	19 g (25g)

Battery for Medical use in Pipette:

VARTA Microbattery's Ni-MH 3/V 150 H and 4/V 150 H batteries (robust family) offer robust, rechargeable battery solutions with reliable power for supplying dosing motors for maintenance free use in pipette or other motor driven applications.

3.6 V: PCBD version see 55615 303 059 solder Tag version (ST) see 55615 603 060

4.8 V: ST version see <u>55615 604 060</u> for 4.8 V solder Tag versions, please contact VARTA Microbattery or find us at: http://www.varta-microbattery.com

- wide temperature range from -20 to +65°C
- long lifetime up to 6 years and above
- high reliability by special sealing construction
- Extended shelf life by the use of robust mass type electrode design
- High overcharge capability by patented GCE electrode
- design flexibility on battery shape side-by-side or stacked, SMD mounting or wire connector
- simple charging system continuous charging possible
- ROHS compatible
- UL recognized cell
- environmentally friendly Ni-MH technology