

RTC Backup for UMPC



NiMH Button Cell

RTC Backup Battery

New generation of Ultra Mobile PC and Netbooks require new solutions regarding size, weight and cost of all components inside a system. The battery can take a significant share in this and will reduce the required board space from 314mm² for the CR2032 → 36mm² for the V 6 HR cell.

Battery challenge

The main challenges for the battery are lifetime in the application, used board space, easy charging, cost and service. NiMH batteries for RTC backup allow low system voltage for low energy demand and high overcharge stability for simple charging solutions. The low self discharge and high deep discharge stability of the cell fulfils the demand for extended shelf life specially for high tech consumer products.

Technical solution:

NiMH Button Cell Technology

For more information, please visit our website:

<https://www.varta-ag.com/de/industrie/produktloesungen/nickel-metallhydrid>



Characteristics	V 6 HR
Voltage	1.2V (other voltages possible)
RTC discharge current	< 6 uA
Capacity	6.2mAh
Discharge Temperature range	-20°C to +65°C
Overcharge capability	0.18mA continuous
Weight	0.28g
Size	Ø 6.8mm x height 2.3mm

RTC Backup Battery

VARTA Microbattery's NiMH V 6 HR batteries (powerful family) and V15H (robust family) offer rechargeable battery solutions with reliable power for supplying new generation of RTC chip solutions for small and ultra small mobile computing applications.

- wide temperature range from -20 to +65°C
- long lifetime – up to 6 years and above
- high reliability
- high capacity capability up to 8 mAh @ 6uA
- simple charging system continuous charging possible
- UL recognized cell
- environmentally friendly NiMH technology