

# Server Backup Battery

## NiMH Button Cells



### RAID Server backup

RAID (redundant array of independent disks) servers stand for safety critical data storage schemes that divide and replicate data among multiple hard disk drives with the target to improve data reliability and I/O performance. A battery is protecting the write cache, mostly solving the risk of data loss in case of unexpected power down.

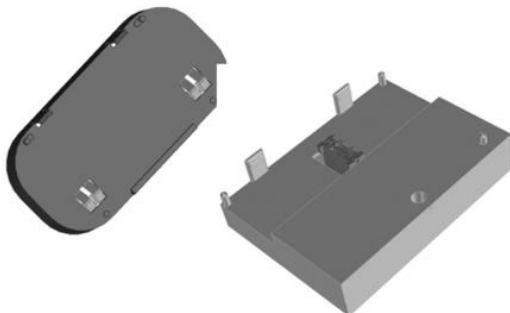
### Battery challenge

The function of the system is heavily influenced by the availability and the reliability of the backup battery. Important features for this battery are slim form factor due to server board architecture, charge efficiency at extended ambient temperature from 45 to 55 °C, reliable energy supply for a backup time of 48-72h, high reliability for a secure life expectancy up to 3 years.

**Technical solution:**  
NiMH Button Cells Technology

For more information, please visit our website:

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



Characteristics	4/V 500 HT Battery
Voltage	4.8V (other voltages possible)
Capacity	500mAh
Discharge Temperature range	45°C to +55°C
Overcharge capability	0.03CA continuous
Cell thickness	6.6mm
Weight	56g

### Server Battery

VARTA Microbatterys NiMH HRT batteries (powerful85 family) offer rechargeable battery solutions with reliable power for supplying backup power to RAID server systems up to 72h at average ambient temperature of 45°C to +55°C.

- wide temperature range -20 to +85°C
- up to 50% increased charge efficiency at extended temperature
- high reliability – by special sealing construction with new synthetic sealing materials
- High current capability
- design flexibility on battery shape side-by-side or stacked
- simple charging system, continuous trickle charging possible with proprietary charging algorithm
- ROHS compatible
- Halogen and Perchlorate free
- UL recognized cell
- environmentally friendly NiMH technology