

European e-Call

Application Note



European e-Call System.

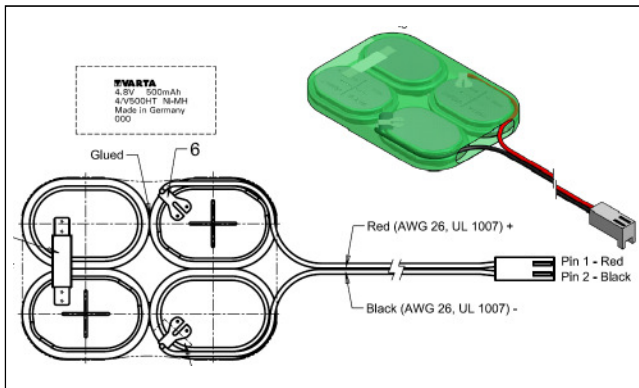
The European commission will implement the automatic emergency call system e-Call by the beginning of 2018. This emergency system provides information about position of the car, extent of damage and allows the insured person to talk to an emergency call centre. Chances for rescue and reduced severity of damage increase significantly.

Battery challenge.

The combination of GPS and GSM system and the need to have sensor data from various positions inside the car requires an independent system with powerful battery that is able to reliably work in the **harsh automotive environment** over the **extended temperature range**. Battery must be robust to withstand car crash and be steadily available at any time.

Technical solution

The V500HT cell out of the powerful85 family of Ni-MH button cells from VARTA Microbattery is specially designed for high discharge currents and extended temperature form -20°C to +85°C.



Characteristics	4/V500HT Battery
Voltage level	4.8V (other voltages possible)
Max peak discharge current	3A
Capacity	500mAh
Discharge Temperature range	-20°C to +85°C
Overcharge capability	0.03CA continuous
Weight	56g

E-Call Battery

VARTA Microbattery's Ni-MH HT and HRT batteries (powerful85 family) offer rechargeable battery solutions with reliable power for supplying GPS and GSM Module in case of emergency or accident. Recommended configurations: 3/V500HT, 4/V500HT or 5/V500HT depending on temperature and power demand.

- wide temperature range -20 to +85°C
- long lifetime – up to 10 years
- high reliability – by special sealing construction with new plastic materials
- high current capability
- design flexibility on voltage level from 1.2V to 12V
- design flexibility on battery shape side-by-side or stacked
- simple charging system continuous charging possible
- UL recognized cell
- ROHS compatible
- Halogen and Perchlorate free
- environmentally friendly Ni-MH technology