

## APPLICATION:

VLADAR ROPzS cells and battery sets are applied as uninterrupted power supply at electric power stations and substations, and for other types of uninterrupted energy supply equipment at the constant recharge and especially in charge-discharge modes.

*Batteries are perfectly suitable for small size photovoltaic systems and similar applications.*

## SPECIFIC FEATURES:

*Combination of patented alloys and unique multifraction filling of positive tubular electrodes PLUDERTEC.*

## MAIN ADVANTAGES OF SERIES:

- Low self-discharge.
- Improved electrical characteristics.
- Semitransparent material of container ensures visual control of electrolyte level during the operation.
- Batteries could be supplied with special metal racks that ensure easy installation and mounting of batteries.



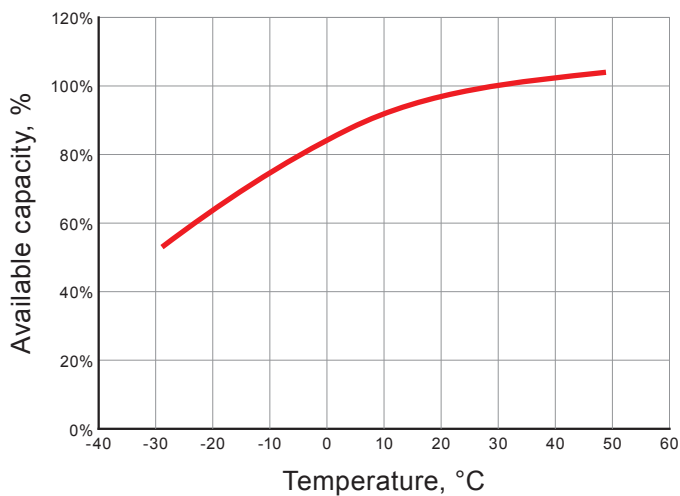
Battery type	Voltage U, V	Capacity C <sub>10'</sub> , Ah	Capacity C <sub>100'</sub> , Ah	Overall dimensions of cell, LxWxH, mm	Weight, kg (max) filled and charged
3 ROPzS 270	2	270	360	198 x 83 x 520	19.0
4 ROPzS 360	2	360	470	198 x 101 x 520	23.8
5 ROPzS 450	2	450	600	198 x 119 x 520	29.5
4 ROPzS 557	2	557	725	198 x 101 x 720	35.7
5 ROPzS 696	2	696	906	198 x 119 x 720	43.7
6 ROPzS 836	2	836	1090	198 x 137 x 720	53.8
7 ROPzS 975	2	975	1270	198 x 155 x 720	64.7
8 ROPzS 1114	2	1114	1450	198 x 173 x 720	73

**Note:** rack design may vary from that shown in the diagram

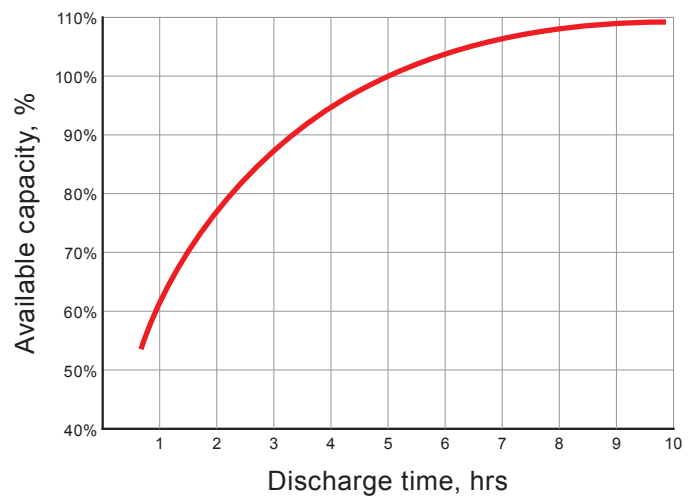
## DESIGN:

- Positive electrode:** tubular plate filled with unique active material PLUDERTEC® providing higher cell lifetime along with required electrical characteristics.
- Negative electrode:** pasted grid plate made of special patented lead alloy providing long battery service life.
- Separation:** electrodes are separated by special high-porous separator made of polymeric materials.
- Container and lid:** made of impact plastic that enables easy service and mechanical stability during all service life. Both cell sides have marking of minimal and maximum electrolyte levels. Semitransparent material of container ensures visual control of electrolyte level during the operation.
- Electrolyte:** water solution of sulfuric acid with density of  $1.245 \pm 0.005 \text{ g/cm}^3$
- Pole terminal:** sealed pole terminal with solid brass bush for bolt M10.
- Ventilation plugs:** plugs design prevents electrolyte splashing even at charging with higher voltage. Special water refilling system is available (optionally).
- Connectors:** flexible or made of solid copper.
- Temperature range:** from +5 to +45°C (+20°C is preferable).
- Installation:** batteries can be supplied and installed with special metal racks.
- Service life:** not less than 10 years (at standby mode).

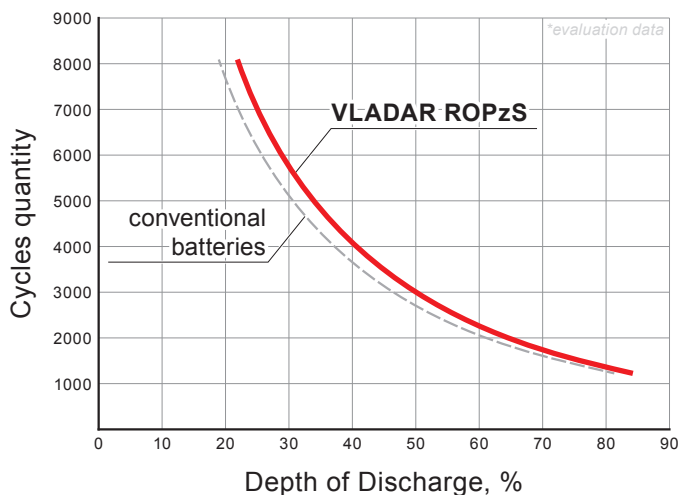
### CAPACITY vs TEMPERATURE



### CAPACITY vs DISCHARGE MODE



### SERVICE LIFE of ROPzS batteries



**Combination of special alloying technologies and multi-fractional filling of positive electrode enables improved electrical characteristics and higher service life of the battery**