

# OPzS Series



## Tubular Flooded Batteries

Classic OPzS batteries have been proven energy suppliers for decades, which convince in robustness, reliability and extremely long design- or cycle life. OPzS is a flooded Lead Acid battery that adopts Tubular Plate technology to offer high reliability and performance. OPzS is designed and manufactured according to DIN40736-2/IEC60896-11 standards and with die-casting positive spine and patent formula of active material. OPzS series batteries offer 400% more cyclic life than the standby series. It is suitable for solar and wind renewable energy storage, traction etc. OPzS series is the best choice for energy system in high altitude area.

### Product Features

- Low maintenance due to optimised alloy and large electrolyte reserve
- Tubular plates in block and single cell version – most robust design
- Excellent standby and cycling behavior – long life
- Completely recyclable – low CO2 footprint
- 20 years design life at 20 °C ambient temperature (80 % remaining capacity from C10)
- Wide operating temperature range from -40°C to 60°C
- Tubular positive plate with prolonged cycle life
- Lead Calcium die cast grid with improved corrosion resistance capability
- Low self-discharge rate and long shelf life
- Excellent deep discharge recovery capability
- Very high operational reliability under rough operating conditions
- Container made from high quality transparent or translucent plastiUP
- Also available in dry charged condition with separate electrolyte
- Low gassing (EN 50272-2) thanks to low antimony alloy: < 2% for cells; < 3% for blocks

### Construction

- Manufactured in Europe in our ISO 9001 certified production plants
- IEC 60896-11, DIN 40736 and DIN 40737 T3

- Positive Plates: Robust tubular plates consisting of Pb-Ca-Sn alloy, optimized for high corrosion resistance, offer an extreme high cycling expectancy
- Negative Plates: Grid plate construction consisting of lead calcium alloy
- Separator: Microporous and robust PVC-SiO2 separator, for positive and negative plates and optimized for low internal resistance
- Container: ABS (UL94-HB), Flammability resistance of UL94-V1 can be available upon request
- Terminal Poles: Screw connection for easy and safe assembly and maintenance-free connection with excellent conductivity
- Electrolyte: diluted sulphuric acid  $d_{20} = 1.24 \text{ kg/l}$
- Valves: Release gas in case of excess pressure and protects the cell against atmosphere. reasonable open and Dose valve pressure, high reliable on

### Standards

- IEC 60896-21/22:2004;
- IEC 61247-2014;
- DIN 43539-15:1984;
- DIN 40742-1999;
- UB/T 22473-2008;
- Passed ISO9001,ISO4001
- OHSAS18001,CE,UL and Golden Sun Certification

### Applications

- Security Systems
- Telecom
- Electric Utilities
- UPS systems
- Control Equipment
- Photovoltaic Systems
- Solar Power Systems
- Medical Equipment
- Renewable Energy System



## Main Parameters Table

| Model      | Nominal Voltage (V) | Capacity (Ah) | Dimension (mm) |       |        |              | Net Weight | Gross Weight | Terminal |
|------------|---------------------|---------------|----------------|-------|--------|--------------|------------|--------------|----------|
|            |                     |               | Length         | Width | Height | Total Height | kgs        | kgs          |          |
| 40PzS200   | 2                   | 200           | 103            | 206   | 355    | 410          | 12.8       | 17.5         | M8       |
| 50PzS250   | 2                   | 250           | 124            | 206   | 355    | 410          | 15.1       | 20.5         | M8       |
| 60PzS300   | 2                   | 300           | 145            | 206   | 355    | 410          | 17.5       | 24           | M8       |
| 50PzS350   | 2                   | 350           | 124            | 206   | 471    | 526          | 19.8       | 27           | M8       |
| 60PzS420   | 2                   | 420           | 145            | 206   | 471    | 526          | 23         | 32           | M8       |
| 70PzS490   | 2                   | 490           | 166            | 206   | 471    | 526          | 26.2       | 38           | M8       |
| 60PzS600   | 2                   | 600           | 145            | 206   | 646    | 701          | 32.6       | 47           | M8       |
| 80PzS800   | 2                   | 800           | 191            | 210   | 646    | 701          | 45         | 64           | M8       |
| 100PzS1000 | 2                   | 1000          | 233            | 210   | 646    | 701          | 54         | 78           | M8       |
| 120PzS1200 | 2                   | 1200          | 275            | 210   | 646    | 701          | 63.6       | 92           | M8       |
| 120PzS1500 | 2                   | 1500          | 275            | 210   | 773    | 828          | 81.7       | 112          | M8       |
| 160PzS2000 | 2                   | 2000          | 399            | 210   | 773    | 828          | 119.5      | 150          | M8       |
| 240PzS2500 | 2                   | 2500          | 487            | 212   | 771    | 826          | 152        | 204          | M8       |
| 240PzS3000 | 2                   | 3000          | 576            | 212   | 772    | 806          | 170        | 230          | M8       |

