

## The energy tank. 20+ years of proven service life.

The ROS2-800 is a 2 V, 800 Ah (10-hour rate) OPzS lead-acid battery from the Rekoser OPzS (Flooded) series. It measures 191 × 210 × 645 mm and weighs 44 kg, with F10 terminals. It stores 1.6 kWh and delivers up to 4000 A. The energy tank. 20+ years of proven service life. Typical applications: Solar/Wind Energy Systems, Electrical Substations, Telecommunications and Base Stations and Railway Signaling and Infrastructure.

Formerly **RKS2-800**.

|                 |                    |
|-----------------|--------------------|
| Nominal Voltage | 2 V                |
| Capacity (25°C) | 800 Ah (C10)       |
| Energy          | 1600 Wh            |
| Weight          | 44 kg              |
| Terminal        | F10                |
| Dimensions      | 191 × 210 × 645 mm |

## MAIN ADVANTAGES

- ✓ **Technology:** Vented tubular plates with liquid electrolyte
- ✓ **Maintenance:** Periodic topping up with distilled water required
- ✓ **Durability:** Over 20 years proven design life at 20°C
- ✓ **Control:** Transparent container for easy electrolyte level monitoring

**20**  
YEARS

### LONG LIFE DESIGN

\* EUROBAT CLASSIFICATION: >12 Years (Very Long Life).

**2**  
YEARS

### WARRANTY

\* Subject to charge and temperature parameters stipulated in this datasheet.

## MAIN APPLICATIONS



**SOLAR/WIND ENERGY SYSTEMS**



**ELECTRICAL SUBSTATIONS**



**TELECOMMUNICATIONS AND BASE STATIONS**



**RAILWAY SIGNALING AND INFRASTRUCTURE**



**MARITIME**



**UPS AND DATA CENTERS**

## QUALITY STANDARDS

CE CERTIFIED

ISO 9001 / 14001

IEC 60896-21/22

YD/T1360

BS6290 part 4

DIN40742

## GRAPHICS (25°C)

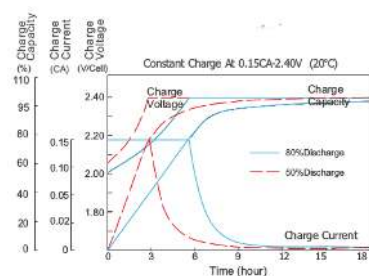
Constant Discharge Ratings (A) at 25°C

| F.V / Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR  | 3HR  | 5HR  | 10HR  | 20HR  | 100HR |
|------------|------|-------|-------|-------|------|------|------|-------|-------|-------|
| 1.90 V     | 319A | 290A  | 264A  | 258A  | 239A | 151A | 111A | 72.8A | 40A   | 10.2A |
| 1.85 V     | 345A | 330A  | 325A  | 323A  | 272A | 167A | 130A | 76A   | 41.8A | 10.8A |
| 1.80 V     | 550A | 528A  | 517A  | 350A  | 350A | 205A | 138A | 80A   | 44A   | 11.2A |
| 1.75 V     | 661A | 634A  | 614A  | 390A  | 390A | 212A | 142A | 82.4A | 46.2A | 11.4A |

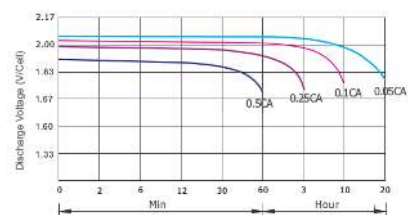
Constant Discharge Ratings (W) at 25°C

| F.V / Time | 5MIN  | 10MIN | 15MIN | 30MIN | 1HR  | 3HR  | 5HR  | 10HR | 20HR  | 100HR |
|------------|-------|-------|-------|-------|------|------|------|------|-------|-------|
| 1.90 V     | 619W  | 563W  | 506W  | 460W  | 460W | 329W | 238W | 150W | 80.6W | 22W   |
| 1.85 V     | 669W  | 642W  | 623W  | 523W  | 523W | 344W | 265W | 163W | 87.8W | 22.9W |
| 1.80 V     | 1068W | 1025W | 878W  | 686W  | 686W | 438W | 302W | 176W | 91.3W | 23.5W |
| 1.75 V     | 1282W | 1230W | 901W  | 691W  | 691W | 463W | 316W | 183W | 93.5W | 23.7W |

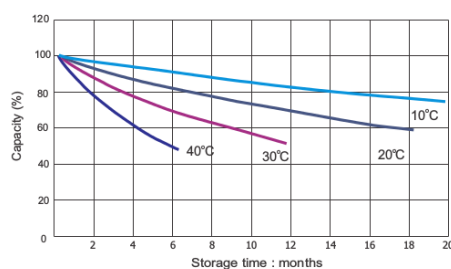
CHARGE CHARACTERISTICS



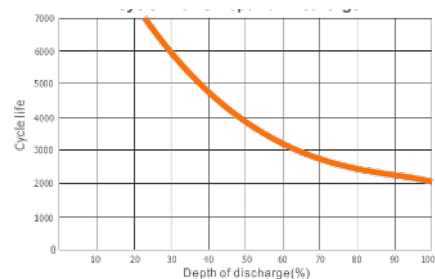
DISCHARGE CHARACTERISTIC 25°C



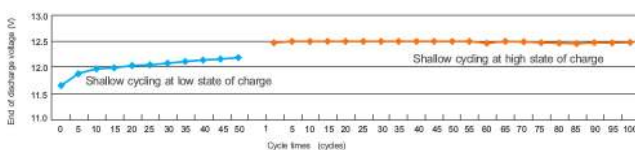
SELF DISCHARGE CHARACTERISTICS



FLOAT VOLTAGE VS FLOAT LIFE



CYCLE DISCHARGE VOLTAGE CURVE (Test standard BS EN 61427:2005)



## SPECIFICATIONS

|                                  |                                                                              |
|----------------------------------|------------------------------------------------------------------------------|
| Nominal Voltage                  | 2 V                                                                          |
| Capacity (25°C)                  | 800 Ah (C10)                                                                 |
| Energy                           | 1600 Wh                                                                      |
| Cell number                      | 1                                                                            |
| Charge Voltage (25°C)            | Cycle use: 2.35-2.40V (-5mV/°C/cell)<br>Float use: 2.21-2.25V (-3mV/°C/cell) |
| Max. Charge Current              | 160 A                                                                        |
| Max. Discharge Current           | 4000 A                                                                       |
| Internal Resistance              | 0.35 mΩ                                                                      |
| Self Discharge                   | 3 % of capacity per month at 20 °C                                           |
| Capacity Affected by Temperature | 40 °C: 102 %, 25 °C: 100 %, 0 °C: 85 %, -15 °C: 65 %                         |

## CONSTRUCTION

| Component    | Material                       |
|--------------|--------------------------------|
| Container    | SAN                            |
| Cover        | ABS (Flame Retardant Optional) |
| Electrolyte  | Sulphuric acid                 |
| Negative     | Lead                           |
| Positive     | Lead dioxide                   |
| Safety Valve | Rubber                         |
| Sealant      | Epoxy Resin                    |
| Separator    | Fibre Glass                    |
| Terminal     | Copper                         |

## QUICK INSTALLATION GUIDE

To ensure optimal performance and maximize the lifespan of your **REKOSER ROS2-800** battery, follow these assembly and connection guidelines.

### 1. SPACE AND DIMENSION VERIFICATION

Before proceeding, ensure the receptacle or cabinet of your equipment complies with the unit's physical measurements:

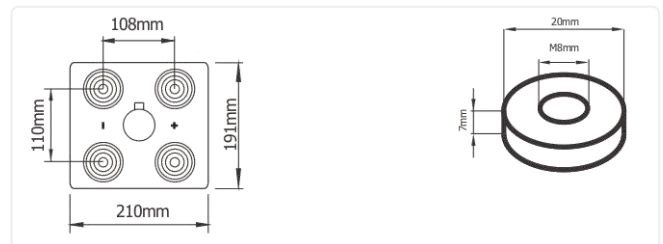
**Length:** 191 mm

**Width:** 210 mm

**Height:** 645 mm

**Total Height:** 700 mm

**Weight:** 44 kg



### 2. TERMINAL CONFIGURATION (F10)

**Terminals:** Ensure your system's connectors match the F10 type to prevent electrical arcing.

**Polarity:** Check the positive and negative markings on the battery before connecting, to prevent short circuits.

### 3. CHARGE PARAMETERS

Cycle use: 2.35-2.40V (-5mV/°C/cell)

Float use: 2.21-2.25V (-3mV/°C/cell)

**Maximum Current:** Do not exceed 160 A of charge.

### 4. SAFETY AND STORAGE

**Maintenance:** Check the electrolyte level and top up only with distilled or demineralised water.

**Position:** Always upright.

**Ventilation:** Install in a ventilated room: hydrogen is released during charging.

**Storage:** Store charged, in a cool and dry place, and recharge periodically.

### NEARBY MODELS

**ROS2-600** (2 V · 600 Ah) · **ROS2-1200** (2 V · 1200 Ah) · [See all ROS series models](#)

**Specialized Technical Support**  
<https://rekoser.com> | +34 958 04 29 73