

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

The ROS2-420 is a 2 V, 420 Ah (10-hour rate) OPzS lead-acid battery from the Rekoser OPzS (Flooded) series. It measures 145 × 206 × 470 mm and weighs 24.5 kg, with M8 terminals. It stores 840 Wh and delivers up to 1500 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 **RKS2-420**.

Nominal Voltage	2 V
Capacity (25°C)	420 Ah (C10)
Energy	840 Wh
Weight	24.5 kg
Terminal	M8
Dimensions	145 × 206 × 470 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)

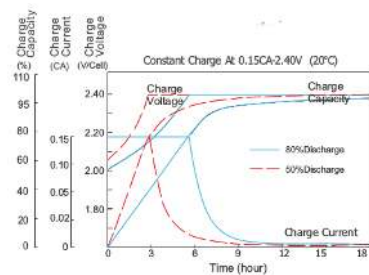
Constant Discharge Ratings (A) at 25°C

F.V / Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR	100HR
1.90 V	168A	152A	139A	136A	126A	79.4A	58.4A	38.2A	21A	5.33A
1.85 V	181A	173A	171A	170A	143A	87.8A	68.5A	39.9A	21.9A	5.67A
1.80 V	289A	277A	271A	234A	184A	108A	72.7A	42A	23.1A	5.88A
1.75 V	347A	333A	323A	267A	205A	111A	74.8A	43.3A	24.3A	6.01A

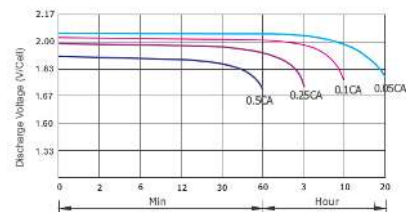
Constant Discharge Ratings (W) at 25°C

F.V / Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR	100HR
1.90 V	325W	296W	265W	257W	242W	173W	125W	79W	42.3W	11.6W
1.85 V	351W	337W	327W	319W	275W	181W	139W	85.7W	46.1W	12W
1.80 V	561W	538W	461W	427W	360W	230W	159W	92.4W	47.9W	12.3W
1.75 V	673W	646W	473W	430W	363W	243W	166W	96.2W	49.1W	12.4W

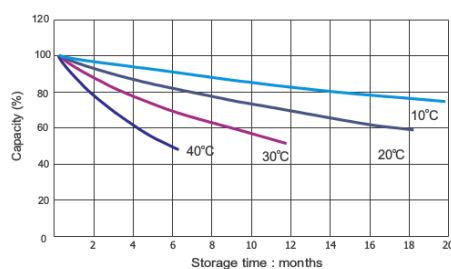
CHARGE CHARACTERISTICS



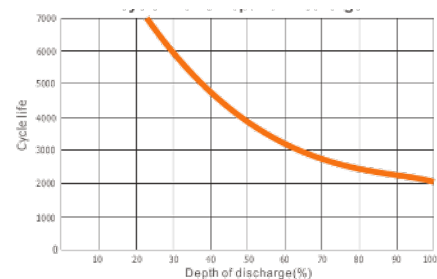
DISCHARGE CHARACTERISTIC 25°C



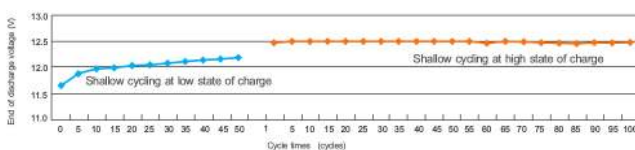
SELF DISCHARGE CHARACTERISTICS



FLOAT VOLTAGE VS FLOAT LIFE



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



SPECIFICATIONS

Nominal Voltage	2 V
Capacity (25°C)	420 Ah (C10)
Energy	840 Wh
Cell number	1
Charge Voltage (25°C)	Cycle use: 2.35-2.40V (-5mV/°C/cell) Float use: 2.21-2.25V (-3mV/°C/cell)
Max. Charge Current	84 A
Max. Discharge Current	1500 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 ROS2-420** 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:

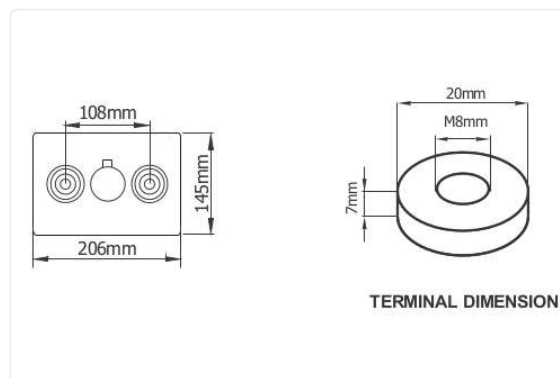
Length: 145 mm

Width: 206 mm

Height: 470 mm

Total Height: 525 mm

Weight: 24.5 kg



2. TERMINAL CONFIGURATION (M8)

Terminals: Ensure your system's connectors match the M8 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 84 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

ROS2-350 (2 V · 350 Ah) · **ROS2-500** (2 V · 500 Ah) · [See all ROS series models](#)

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