

RES SLT Quality Batteries for Renewable Energy Storage



BATTERIES



SOLAR PV



WIND



GENSET



SUNLIGHT

creating energy

RES SLT OVERVIEW

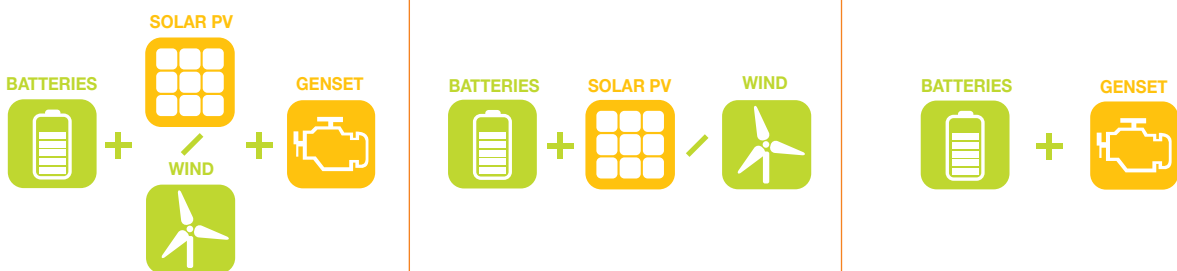
Quality Batteries for Renewable Energy Applications

RES SLT is a **quality range** of batteries designed for **daily cycling operation** offering significant benefits in terms of **cost per cycle**. Their **long life** and remarkably high **performance** suits ideally to the demanding **Renewable Energy Storage** applications.



APPLICATIONS

Indicative Battery-Based Power Supply Systems



Residential Installations

Off-grid or smart grid connected power systems electrifying homes

Traffic Systems

Signaling and lighting roads, railways, airports and marines

Remote Monitoring & Controlling

Flow and pressure metering, instrumentation and measurements, process automation, Supervisory Control & Data Acquisition (SCADA), security monitoring devices

QUALITY FEATURES & PRODUCT BENEFITS

Long cycle life

Batteries engineered to sustain their capacity for a high number of cycles offering exceptional efficiency for daily deep cycling applications.

Outstanding performance

Tubular plate design, exclusive use of high quality raw materials and sophisticated production processes in European manufacturing facilities ensure efficiency, durability and reliability under demanding conditions such as remote locations and the intermittent nature of solar and wind power generation.

Ease of handling

Designed for optimal space utilization, quick installation and easy maintenance.

Availability

Fast delivery for catalogue models. On request a wider range of special batteries for customer's special requirements can be supplied.

Peace-of-mind

24x7 experienced pre-sales and after sales support through SUNLIGHT Global Partners Network.

Optimum Total Cost of Ownership (TCO)

Low cost per cycle. Lifetime value is maximized especially at hybrid systems where using batteries can greatly reduce the Genset daily run time resulting on fuel savings and less CO₂ emission.

The ideal energy solution for Renewable Energy Storage applications

ADDED VALUE SERVICES

Design and implementation of turnkey solutions

Installation & maintenance services according to EN50272-2 safety requirements (CE compliance)

360° Technical Support 24x7 through SUNLIGHT Global Partners Network

Training and consulting

Battery Collection and Recycling Services

Why SUNLIGHT?

- 30 years of Experience in Battery Business
- Extensive Global Know-how
- "One Stop Solution"
- Exceptional Customer Service

RES SLT

Vented Tubular Plate Batteries



Type	RES SLT 12-50	RES SLT 12-80	RES SLT 12-120	RES SLT 12-170
Voltage (V):	12	12	12	12
Length (mm):	205	265	308	345
Width (mm):	175	175	175	170
Height* (mm):	190	210	225	285
Weight (kg):	13.9	19.9	27.2	38.4
Number Of Batteries Per Europallet:	72	48	56	36

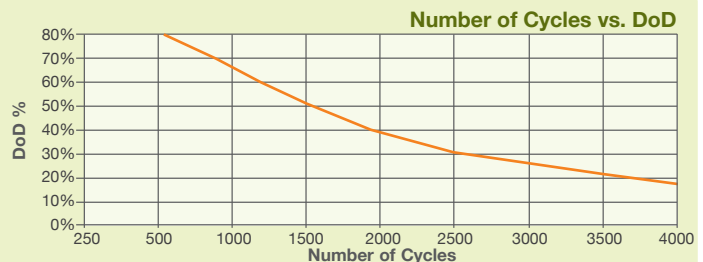
*includes poles

Capacity (Ah at 20°C)

Type	C240 1.85 Vpc	C120 1.85 Vpc	C72 1.85 Vpc	C48 1.80 Vpc	C24 1.80 Vpc	C12 1.80 Vpc	C10 1.80 Vpc	C5 1.75 Vpc	C2 1.70 Vpc
RES SLT 12-50	61	53	52	53	45	41	39	36	28
RES SLT 12-80	95	82	81	83	70	63	60	56	44
RES SLT 12-120	144	125	123	126	106	96	92	85	66
RES SLT 12-170	201	173	170	175	147	134	127	118	92
RES SLT 12-220	255	220	216	222	186	170	162	150	117
RES SLT 6-270	314	271	267	274	230	210	200	185	144
RES SLT 6-290	340	293	289	297	249	227	216	200	156
RES SLT 6-380	450	388	382	393	329	300	286	265	207
RES SLT 6-460	544	469	462	474	398	363	345	320	250

Key Benefits

A remarkably high number of cycles that offers exceptional efficiency for daily cycling applications. The cycle life rating allows the determination of the true value of the battery over its life by understanding the total cost of ownership.



Vented tubular plate design is superior because of the following technical features

Features

- Higher active mass surface area than plain flat plates
- No active material shedding
- Reduced grid corrosion
- Reduced self-discharge rate
- Quality and homogeneity

Benefits

- ✓ Long cycle life
- ✓ Excellent cycling properties
- ✓ High capacity performance
- ✓ Increased endurance even in cases of poor charging conditions



RES SLT 12-220

RES SLT 6-270

RES SLT 6-290

RES SLT 6-380

RES SLT 6-460

12	6	6	6	6
510	260	260	305	305
222	180	180	188	188
225	275	275	365	365
47.3	29.9	32.5	47.9	50.5
28	48	48	28	28

Operation

Number of cycles: 1200 cycles (@60% DoD, 20°C)

Maintenance: Low topping up requirements.

Operating temperature: Min: -20°C / Max: 45°C. Recommended 15°C to 35°C.

Self discharge rate: Approx. 2% per month at 20°C.

Storage Time: Maximum shelf life up to 5 months at 20°C, 4 months at 30°C or 2 months at 40°C.

Recommended Charging Voltage: 2.25 to 2.30 V/cell (stand-by use at 20°C), 2.35 to 2.45 V/cell (cycle use at 20°C).

Design

Positive plates: Tubular plates with optimized anticorrosion characteristics due to the use of special low antimony lead alloy. Tubes filled by injection with active material (mixture of lead oxide and red lead).

Negative plates: Plates composed of reinforced grids design pasted with optimized lead alloy.

Separators: High-porosity separators with minimal internal resistance.

Secured insulation between positive and negative plates.

Electrolyte: Optimized electrolyte density (acid-water), for proper ionic exchange.

Container, lid material: Corrosion-resistant polypropylene material. Lids completely heat sealed.

Terminals: Automotive Post type. On the same side for 12V blocks and diagonally for 6V blocks.

Valves: Filler caps with vent valves for proper battery ventilation.