

# OPzS Solar Power

Eternity Technologies vented lead-acid batteries for the renewable energy market. Optimised design results in a low maintenance, reliable energy storage solution for critical and unstable conditions.

**N** Part of our Network Power range

## Features

- High energy density
- Robust tubular positive electrode design, compliant with DIN 40736
- Minimal maintenance due to low antimony alloy and large electrolyte volume
- Operating temperature 15°C to 35°C
- Low self discharge rate of approximately 3% per month at 20°C
- EUROBAT design life: Long Life > 12 years
- Fully recyclable with low CO<sub>2</sub> footprint
- High cyclic performance



## Applications

- Solar/ Wind Power Stations
- Traffic Systems
- Hydro Power Generation
- Off Grid Solutions
- Telecommunications/ Mobile Phone Stations
- Power Distribution Companies

## Cell specification

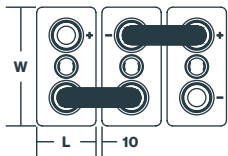
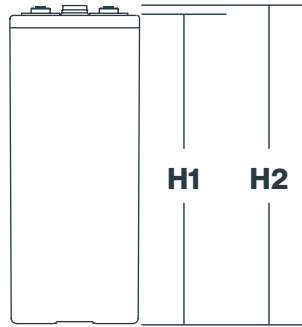
Cell Type	Plate (Ah)	Length (mm)	Width (mm)	Height over pillar (mm)	Height inc. connectors (mm)	Dry weight (kg)	Filled weight (kg)	Internal resistance (mOhm)	Short circuit current (A)
4 OPzS-ET 315SOLAR	50	105	208	367	392	12.9	17.7	0.89	2150
5 OPzS-ET 395SOLAR	50	126	208	367	392	15.5	21.3	0.74	2650
6 OPzS-ET 475SOLAR	50	147	208	367	392	18.3	25.2	0.63	3200
5 OPzS-ET 520SOLAR	70	126	208	483.5	509	20.0	27.4	0.67	2850
6 OPzS-ET 625SOLAR	70	147	208	483.5	509	23.4	32.2	0.57	3450
7 OPzS-ET 725SOLAR	70	168	208	483.5	509	26.7	36.9	0.5	4050
6 OPzS-ET 915SOLAR	100	147	208	656	681	32.1	41.1	0.47	4300
8 OPzS-ET 1220SOLAR	100	212	193	657	682	45.0	60.4	0.33	5700
10 OPzS-ET 1525SOLAR	100	212	235	659	684	54.5	73.6	0.27	7100
12 OPzS-ET 1830SOLAR	100	212	277	658	683	63.8	86.7	0.23	8550
12 OPzS-ET 2100SOLAR	125	212	277	809	834	77.1	105.6	0.23	8450
16 OPzS-ET 2800SOLAR	125	215	400	784	809	103.8	146.2	0.17	12150
20 OPzS-ET 3500SOLAR	125	214	489	782	807	127.5	178.8	0.13	15200
22 OPzS-ET 3850SOLAR	125	214	578	784	809	138.4	200.8	0.11	16750
24 OPzS-ET 4200SOLAR	125	214	578	784	809	147.1	209.1	0.11	18300

## Capacities C10 - C240

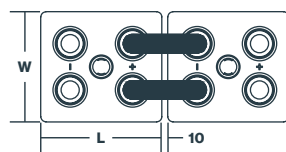
Cell Type U <sub>e</sub> (100%) / VPC Ref Temp	C10 1.80 20°C	C12 1.80 20°C	C20 1.80 20°C	C24 1.80 20°C	C48 1.80 20°C	C72 1.80 20°C	C100 1.85 20°C	C120 1.85 20°C	C240 1.85 20°C
4 OPzS-ET 315SOLAR	225	228	248	260	280	296	307	316	329
5 OPzS-ET 395SOLAR	280	284	309	325	349	370	383	395	411
6 OPzS-ET 475SOLAR	335	341	369	390	418	444	460	474	493
5 OPzS-ET 520SOLAR	400	407	440	450	451	484	504	520	541
6 OPzS-ET 625SOLAR	480	488	527	541	543	580	605	625	649
7 OPzS-ET 725SOLAR	560	569	617	631	639	677	706	725	757
6 OPzS-ET 915SOLAR	690	700	759	781	851	910	888	915	952
8 OPzS-ET 1220SOLAR	920	933	1013	1041	1134	1213	1183	1220	1269
10 OPzS-ET 1525SOLAR	1150	1166	1265	1301	1418	1517	1479	1525	1586
12 OPzS-ET 1830SOLAR	1380	1399	1519	1561	1702	1820	1775	1830	1903
12 OPzS-ET 2100SOLAR	1650	1668	1809	1858	1929	2030	2037	2100	2184
16 OPzS-ET 2800SOLAR	2200	2224	2405	2478	2562	2707	2716	2800	2912
20 OPzS-ET 3500SOLAR	2750	2780	3005	3097	3210	3383	3395	3500	3640
22 OPzS-ET 3850SOLAR	3025	3059	3307	3407	3538	3722	3735	3850	4004
24 OPzS-ET 4200SOLAR	3300	3337	3625	3716	3871	4060	4074	4200	4368

**H1: Height over lid**  
**H2: Height over pillar**  
**M10 threaded terminal**  
**Torque: 23Nm**

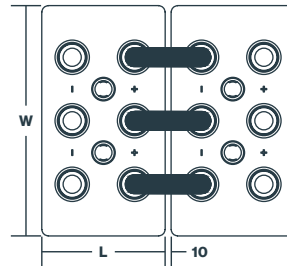
**Not to scale**



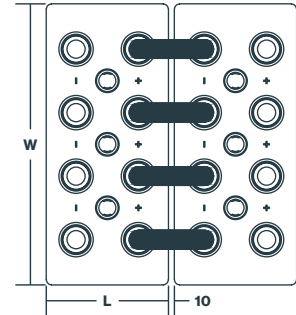
**4 OPzS-ET305SOLAR to  
6 OPzS-ET915SOLAR**



**8 OPzS-ET1220SOLAR to  
12 OPzS-ET2100SOLAR**

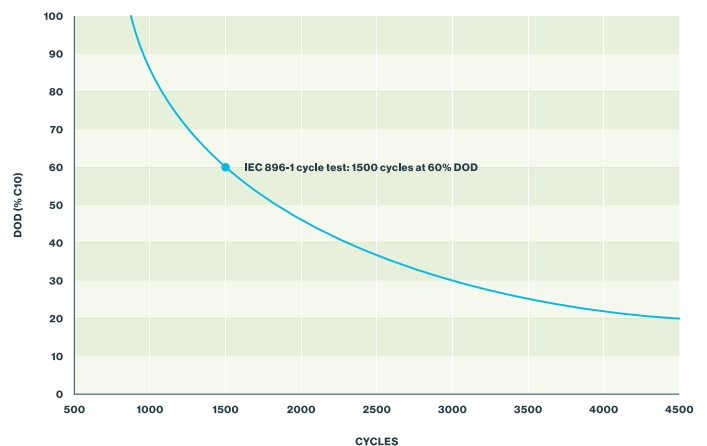


**16 OPzS-ET2800SOLAR**



**20 OPzS-ET3500SOLAR to  
24 OPzS-ET4200SOLAR**

## Cycles vs DOD of OPzS Solar Power



## OPzS Solar Power

### Positive plate

High energy density tubular design with low antimony alloy for extended watering intervals

### Negative plate

Industry leading negative plate design

### Separator

High-porosity and corrosion-resistant ensures maximum capacity for the lifetime of the cell

### Container

Manufactured from Styrene-Acrylonitrile resin (SAN) which is durable and heat resistant



### Terminal

Maintains an airtight seal even when the plates expand and grow throughout the lifetime of the cell

### Gauntlet

Non-woven, high-capacity polyester gauntlet

### Electrolyte

Acid density of 1.24kg/l ensures low self-discharge rates and long design life of the cell

### Lid

Manufactured from Acrylonitrile-Butadiene-Styrene (ABS) which is durable and heat resistant

# POWER FOR TOMORROW TODAY

The Eternity Technologies range is built using only the highest quality and most efficient production processes at our state-of-the-art manufacturing centre in the UAE.

It is this innovation, modern design criteria and industry-leading machinery that allows Eternity Technologies to not only meet the needs of the global industrial market with increased reliability but define it for the future.



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**Accessories**



**Bloc Batteries**



**Chargers**



**Network Power**



**Motive Power**



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