

# 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

3000+ cycles @ 60% DOD @ IUI charging



## Applications

Solar/ Wind Power Stations

Traffic Systems

Hydro Power Generation

Off Grid Solutions

Telecommunications/ Mobile Phone Stations

Power Distribution Companies

## Cell specification

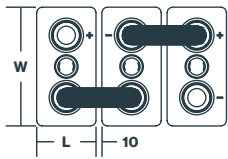
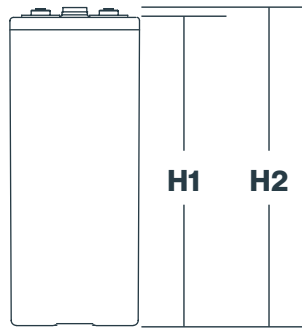
Cell Type	Plate (Ah)	Length (mm)	Width (mm)	Height over lid (mm)	Height over pillar (mm)	Dry weight (kg)	Filled weight (kg)	Internal resistance (mOhm)	Short circuit current (A)
4 OPzS-ET 315SOLAR	50	103	206	355	368	12.9	17.7	0.89	2150
5 OPZS-ET 395SOLAR	50	124	206	355	368	15.5	21.3	0.74	2650
6 OPZS-ET 475SOLAR	50	145	206	355	368	18.3	25.2	0.63	3200
5 OPZS-ET 520SOLAR	70	124	206	471	484	20.0	27.4	0.67	2850
6 OPZS-ET 625SOLAR	70	145	206	471	484	23.4	33.3	0.57	3450
7 OPZS-ET 725SOLAR	70	166	206	471	484	26.7	36.9	0.5	4050
6 OPZS-ET 915SOLAR	100	145	206	647	660	32.1	41.1	0.47	4300
7 OPZS-ET 1070SOLAR	100	145	206	647	660	43.0	57.0	0.35	5000
8 OPZS-ET 1220SOLAR	100	210	191	647	660	45.0	60.4	0.33	5700
9 OPZS-ET 1375SOLAR	100	210	233	647	660	52.5	71.5	0.27	6400
10 OPZS-ET 1525SOLAR	100	210	233	647	660	54.5	73.6	0.27	7100
11 OPZS-ET 1680SOLAR	100	210	275	647	660	59.5	83.5	0.23	7850
12 OPZS-ET 1830SOLAR	100	210	275	647	660	63.8	86.7	0.23	8550
12 OPZS-ET 2100SOLAR	125	210	275	797	810	77.1	105.6	0.23	8450
14 OPZS-ET 2450SOLAR	125	214	399	772	785	93.5	133.5	0.17	10650
16 OPZS-ET 2800SOLAR	125	214	399	772	785	103.8	146.2	0.17	12150
18 OPZS-ET 3150SOLAR	125	212	487	772	785	119.0	165.0	0.15	13700
20 OPZS-ET 3500SOLAR	125	212	487	772	785	127.5	178.8	0.13	15200
22 OPZS-ET 3850SOLAR	125	212	575	772	785	138.4	200.8	0.11	16750
24 OPZS-ET 4200SOLAR	125	212	575	772	785	147.1	209.1	0.11	18300
26 OPZS-ET 4550SOLAR	125	212	575	772	785	159.5	222	0.11	19800

## Capacities C10 - C240

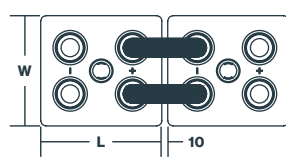
Cell Type U <sub>e</sub> (100%) / VPC Ref Temp	C10 1.80 20°C	C12 1.80 20°C	C20 1.80 20°C	C24 1.80 20°C	C48 1.80 20°C	C72 1.80 20°C	C100 1.85 20°C	C120 1.85 20°C	C240 1.85 20°C
4 OPzS-ET 315SOLAR	225	228	248	260	280	296	307	316	329
5 OPZS-ET 395SOLAR	280	284	309	325	349	370	383	395	411
6 OPZS-ET 475SOLAR	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
7 OPZS-ET 1070SOLAR	805	818	888	913	995	1064	1038	1070	1113
8 OPZS-ET 1220SOLAR	920	933	1013	1041	1134	1213	1183	1220	1269
9 OPZS-ET 1375SOLAR	1035	1049	1139	1171	1276	1365	1331	1375	1427
10 OPZS-ET 1525SOLAR	1150	1166	1265	1301	1418	1517	1479	1525	1586
11 OPZS-ET 1680SOLAR	1265	1282	1392	1431	1560	1668	1627	1680	1744
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
14 OPZS-ET 2450SOLAR	1925	1946	2104	2168	2242	2369	2377	2450	2548
16 OPZS-ET 2800SOLAR	2200	2224	2405	2478	2562	2707	2716	2800	2912
18 OPZS-ET 3150SOLAR	2475	2502	2705	2787	2889	3045	3056	3150	3276
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
26 OPZS-ET 4550SOLAR	3575	3615	3297	4026	4194	4398	4144	4550	4732

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

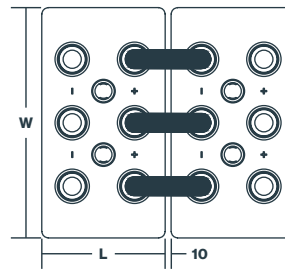
**Not to scale**



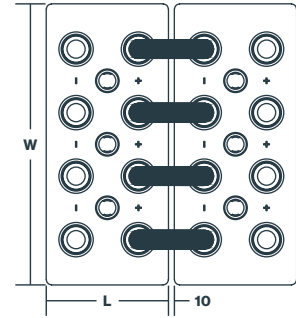
**4 OPzS-ET315SOLAR to  
7 OPzS-ET1070SOLAR**



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

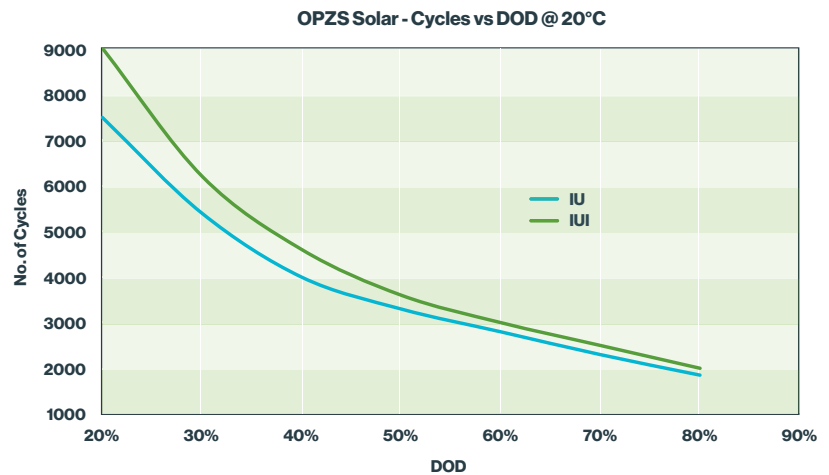


**14 OPzS-ET2450SOLAR to  
16 OPzS-ET2800SOLAR**



**18 OPzS-ET3150SOLAR to  
26 OPzS-ET4550SOLAR**

## 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.



**Service**



**Accessories**



**Bloc Batteries**



**Chargers**



**Network Power**



**Motive Power**



**Eternity**  
TECHNOLOGIES

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