

# OPzV Solar Power

Eternity Technologies valve regulated lead-acid batteries for the solar power and renewable energy market. With an innovative Gel-Technology design Eternity Technologies OPzV batteries have a reliable maintenance-free and leakage-free construction.

**N** Part of our Network Power range

## Features

High energy density and cyclic performance

Robust tubular positive electrode design, compliant with DIN 40742

>1500 cycles at 80% D.O.D at 20°C (68°F)

Low self discharge rate allows for up to 2 years shelf life

Operating temperature -20°C to +55°C

EUROBAT design life: Long Life > 12 years

Fully recyclable with low CO<sub>2</sub> footprint

3000+ cycles @ 60% D.O.D @ IU1 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)	Typical max weight (kg)	Internal resistance (mOhm)	Short circuit current (A)	Capacity (Ah) C120 - 1.85V Cell at 20°C
4 OPzV-ET 280SOLAR	50	103	206	354	367	18.4	0.95	1650	274
5 OPzV-ET 350SOLAR	50	124	206	354	367	22.2	0.78	2100	345
6 OPzV-ET 400SOLAR	50	145	206	354	367	26.2	0.63	2550	405
5 OPzV-ET 500SOLAR	70	124	206	471	484	30.7	0.63	2800	500
6 OPzV-ET 600SOLAR	70	145	206	471	484	36.2	0.54	3400	599
7 OPzV-ET 700SOLAR	70	166	206	471	484	41.7	0.46	4050	695
6 OPzV-ET 900SOLAR	100	145	206	643	656	50.0	0.51	4350	852
8 OPzV-ET 1200SOLAR	100	210	191	644	657	66.3	0.39	4550	1140
10 OPzV-ET 1500SOLAR	100	210	233	646	659	81.7	0.33	6050	1428
12 OPzV-ET 1800SOLAR	100	210	275	645	658	97.0	0.28	7600	1716
12 OPzV-ET 2000SOLAR	125	210	275	796	809	111.9	0.25	8500	1940
16 OPzV-ET 2600SOLAR	125	214	399	771	784	155.6	0.21	10500	2595
20 OPzV-ET 3300SOLAR	125	212	487	769	782	190.1	0.16	13000	3274
22 OPzV-ET 3600SOLAR	125	212	575	771	784	216.14	0.13	14600	3601
24 OPzV-ET 3950SOLAR	125	212	575	771	784	226.2	0.11	16000	3928
26 OPzV-ET 4250SOLAR	125	212	575	771	784	236.0	0.11	17300	4255

## Capacities C10 - C240

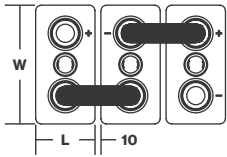
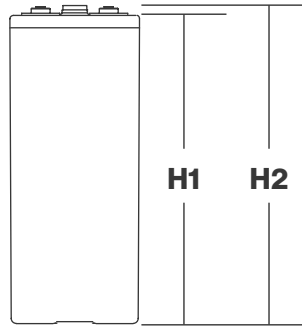
Cell Type Ue (100%) / VPC Ref Temp	C10 1.80 20°C	C24 1.80 20°C	C48 1.80 20°C	C72 1.80 20°C	C100 1.85 20°C	C120 1.85 20°C	C240 1.85 20°C
4 OPzV-ET 280SOLAR	214	244	255	270	266	274	282
5 OPzV-ET 350SOLAR	270	308	321	340	336	345	355
6 OPzV-ET 400SOLAR	316	360	376	398	394	405	417
5 OPzV-ET 500SOLAR	391	450	454	485	487	500	515
6 OPzV-ET 600SOLAR	468	538	543	580	583	599	617
7 OPzV-ET 700SOLAR	543	624	630	673	676	695	716
6 OPzV-ET 900SOLAR	670	718	773	842	830	852	888
8 OPzV-ET 1200SOLAR	895	958	1027	1131	1110	1140	1176
10 OPzV-ET 1500SOLAR	1115	1215	1282	1380	1380	1428	1464
12 OPzV-ET 1800SOLAR	1340	1462	1541	1660	1660	1716	1776
12 OPzV-ET 2000SOLAR	1516	1713	1895	1986	1904	1940	1998
16 OPzV-ET 2600SOLAR	2027	2270	2453	2574	2529	2595	2673
20 OPzV-ET 3300SOLAR	2558	2865	3095	3249	3192	3274	3372
22 OPzV-ET 3600SOLAR	2813	3151	3404	3573	3511	3601	3709
24 OPzV-ET 3950SOLAR	3069	3437	3713	3898	3830	3928	4046
26 OPzV-ET 4250SOLAR	3325	3791	4023	4223	4149	4255	4383

**Horizontal installation possible up to 12 OPzV-ET 1800SOLAR  
VO option available**

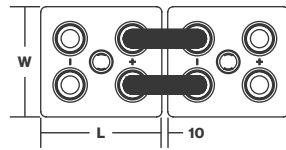
\*For horizontal storage of cells larger than 12 OPzV-ET 1800SOLAR please contact Eternity Technologies

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

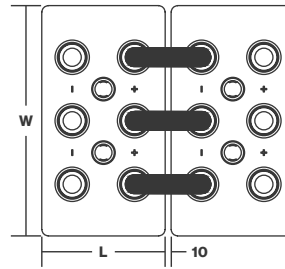
**Not to scale**



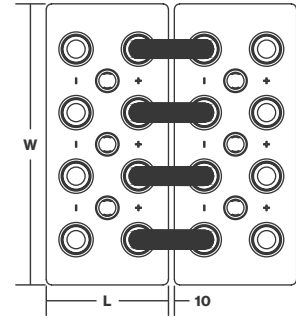
**4 OPzV-ET 280SOLAR to  
6 OPzV-ET 900SOLAR**



**8 OPzV-ET 1200SOLAR to  
12 OPzV-ET 2000SOLAR**

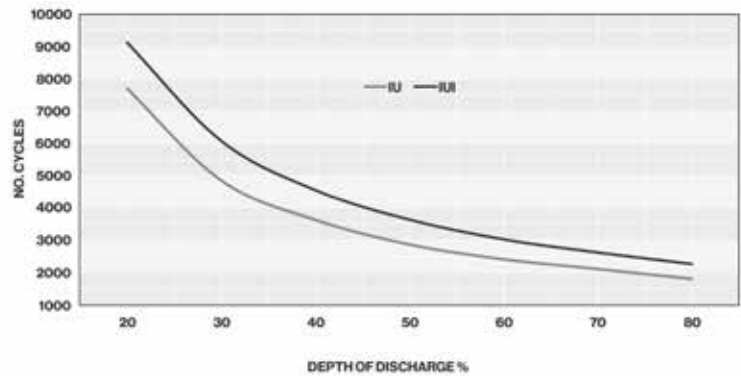


**16 OPzV-ET 2600SOLAR**



**20 OPzV-ET 3300SOLAR to  
26 OPzV-ET 4250SOLAR**

## Cycles vs DOD of OPzV Solar Power



## OPzV Solar Power

### Positive plate

High energy density tubular design with lead calcium alloy ensures low self-discharge rates and low float currents

### Negative plate

Industry leading negative plate design

### Separator

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

### Gauntlet

Non-woven, high-capacity polyester gauntlet



### Terminal

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

### Electrolyte

Silica-based gel electrolyte that is maintenance free

### Pressure release valve

Opens at high pressure to release hydrogen gas created during operation

### Container and 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**



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