

RESERVE POWER



# OPzV Solar

VRLA Gel Deep Cycle Batteries

**POWER FOR TOMORROW TODAY**

## OPzV Solar Battery

**With an extensive product range available Eternity Technologies prides itself on world-class product design, production processes, technical development, cost structure and global location.**

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.

## OPzV Solar Technology

### 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

### Container

Manufactured from Acrylonitrile-Butadiene-Styrene (ABS) which is durable and offers good resistance to heat and chemicals. UL94-V0 flame retardant option also available



### 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

Silica-based-gel-form electrolyte that has no water loss and therefore maintenance free

### Lid

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

## Features of OPzV Solar Batteries...

High energy density and cyclic performance

Robust tubular positive electrode design, compliant with DIN 40742

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

Operating temperature -20°C to +55°C

20 year float life at 20°C (68°F)

EUROBAT design life: Long Life > 12 years

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

3000+ cycles @ 60% D.O.D @ IUI charging

## Applications...

Solar / Wind Power Systems

Traffic Systems

Hydro Power Generation

Off grid Solutions

Telecommunications

Power Distribution Companies

**Compliant with:** EC 60896-21/22/ IEC61427



# OPzV Solar

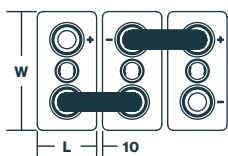
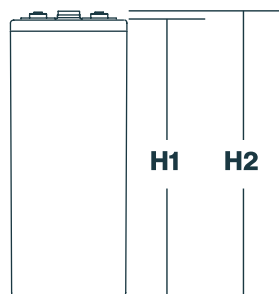
| Cell Type            | Plate (Ah) | Length (mm) | Width (mm) | Height over lid (mm) | Height over pillar (mm) | Typical max weight (kg) | Internal resistance (mOhm) | Short circuit current (A) | Capacity (Ah) C120 - 1.85V Cell at 25°C |
|----------------------|------------|-------------|------------|----------------------|-------------------------|-------------------------|----------------------------|---------------------------|---|
| 2 OPzV-ET 140SOLAR   | 50         | 103         | 206        | 354                  | 367                     | 10.5                    | 1.93                       | 1050                      | 141                                     |
| 3 OPzV-ET 210SOLAR   | 50         | 103         | 206        | 354                  | 367                     | 15.3                    | 1.30                       | 1600                      | 212                                     |
| 4 OPzV-ET 280SOLAR   | 50         | 103         | 206        | 354                  | 367                     | 18.4                    | 0.95                       | 2100                      | 282                                     |
| 5 OPzV-ET 350SOLAR   | 50         | 124         | 206        | 354                  | 367                     | 22.2                    | 0.79                       | 2600                      | 356                                     |
| 6 OPzV-ET 400SOLAR   | 50         | 145         | 206        | 354                  | 367                     | 26.2                    | 0.63                       | 3300                      | 417                                     |
| 5 OPzV-ET 500SOLAR   | 70         | 124         | 206        | 471                  | 484                     | 30.7                    | 0.62                       | 3350                      | 516                                     |
| 6 OPzV-ET 600SOLAR   | 70         | 145         | 206        | 471                  | 484                     | 36.2                    | 0.54                       | 3900                      | 618                                     |
| 7 OPzV-ET 700SOLAR   | 70         | 166         | 206        | 471                  | 484                     | 41.7                    | 0.47                       | 4400                      | 717                                     |
| 6 OPzV-ET 900SOLAR   | 100        | 145         | 206        | 643                  | 656                     | 50.0                    | 0.49                       | 4300                      | 884                                     |
| 7 OPzV-ET 1050SOLAR  | 100        | 145         | 206        | 643                  | 656                     | 53.0                    | 0.41                       | 4900                      | 1031                                    |
| 8 OPzV-ET 1200SOLAR  | 100        | 210         | 191        | 644                  | 657                     | 66.3                    | 0.39                       | 5200                      | 1181                                    |
| 9 OPzV-ET 1350SOLAR  | 100        | 210         | 233        | 646                  | 659                     | 78.0                    | 0.38                       | 5445                      | 1329                                    |
| 10 OPzV-ET 1500SOLAR | 100        | 210         | 233        | 646                  | 659                     | 81.7                    | 0.33                       | 6050                      | 1471                                    |
| 11 OPzV-ET 1600SOLAR | 100        | 210         | 275        | 645                  | 658                     | 92.0                    | 0.28                       | 7150                      | 1618                                    |
| 12 OPzV-ET 1800SOLAR | 100        | 210         | 275        | 645                  | 658                     | 97.0                    | 0.26                       | 7900                      | 1766                                    |
| 13 OPzV-ET 1950SOLAR | 100        | 210         | 275        | 645                  | 658                     | 100.0                   | 0.25                       | 8300                      | 1865                                    |
| 11 OPzV-ET 1800SOLAR | 125        | 210         | 275        | 796                  | 809                     | 102.0                   | 0.27                       | 7800                      | 1834                                    |
| 12 OPzV-ET 2000SOLAR | 125        | 210         | 275        | 796                  | 809                     | 111.9                   | 0.24                       | 8500                      | 2000                                    |
| 13 OPzV-ET 2113SOLAR | 125        | 210         | 275        | 796                  | 809                     | 116.0                   | 0.22                       | 9500                      | 2173                                    |
| 14 OPzV-ET 2300SOLAR | 125        | 214         | 399        | 771                  | 784                     | 145.8                   | 0.21                       | 10000                     | 2340                                    |
| 15 OPzV-ET 2438SOLAR | 125        | 214         | 399        | 771                  | 784                     | 150.0                   | 0.19                       | 11000                     | 2508                                    |
| 16 OPzV-ET 2600SOLAR | 125        | 214         | 399        | 771                  | 784                     | 155.6                   | 0.18                       | 11500                     | 2675                                    |
| 17 OPzV-ET 2800SOLAR | 125        | 214         | 399        | 771                  | 784                     | 156.0                   | 0.17                       | 12200                     | 2842                                    |
| 18 OPzV-ET 2970SOLAR | 125        | 214         | 399        | 771                  | 784                     | 165.0                   | 0.16                       | 13000                     | 3038                                    |
| 19 OPzV-ET 3135SOLAR | 125        | 212         | 487        | 769                  | 782                     | 187.6                   | 0.15                       | 14000                     | 3207                                    |
| 20 OPzV-ET 3300SOLAR | 125        | 212         | 487        | 769                  | 782                     | 190.1                   | 0.14                       | 14500                     | 3376                                    |
| 21 OPzV-ET 3440SOLAR | 125        | 212         | 575        | 771                  | 784                     | 214.0                   | 0.13                       | 15450                     | 3543                                    |
| 22 OPzV-ET 3600SOLAR | 125        | 212         | 575        | 771                  | 784                     | 216.4                   | 0.12                       | 16700                     | 3712                                    |
| 23 OPzV-ET 3785SOLAR | 125        | 212         | 575        | 771                  | 784                     | 223.6                   | 0.11                       | 18200                     | 3881                                    |
| 24 OPzV-ET 3950SOLAR | 125        | 212         | 575        | 771                  | 784                     | 226.2                   | 0.10                       | 20000                     | 4050                                    |
| 25 OPzV-ET 4090SOLAR | 125        | 212         | 575        | 771                  | 784                     | 233.3                   | 0.10                       | 20200                     | 4219                                    |
| 26 OPzV-ET 4250SOLAR | 125        | 212         | 575        | 771                  | 784                     | 236.0                   | 0.10                       | 20500                     | 4388                                    |

**Horizontal installation possible up to 13 OPzV-ET 1950SOLAR** \*For horizontal storage of cells larger than 13 OPzV-ET 1950SOLAR please contact Eternity Technologies

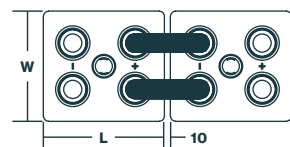
**V0 option available**

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

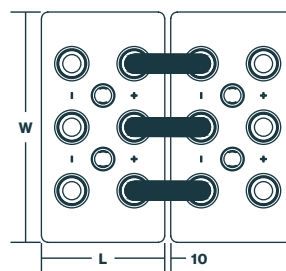
**Not to scale**



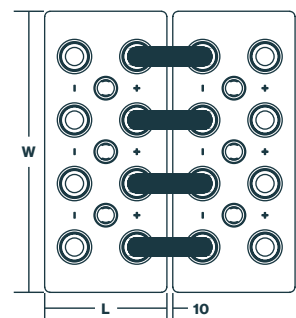
**2 OPzV-ET 140SOLAR to  
7 OPzV-ET 1050SOLAR**



**8 OPzV-ET 1200SOLAR to  
13 OPzV-ET 2100SOLAR**



**14 OPzV-ET 2300SOLAR to  
18 OPzV-ET 2970SOLAR**

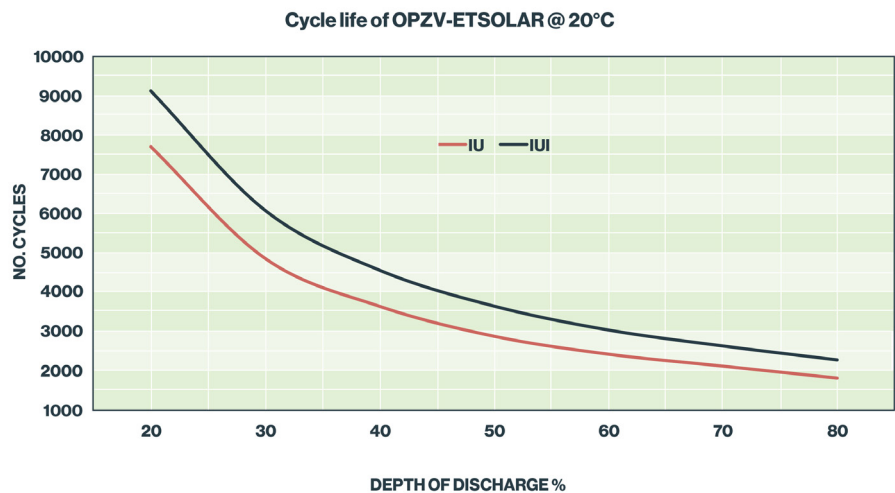


**19 OPzV-ET 3135SOLAR to  
26 OPzV-ET 4250SOLAR**

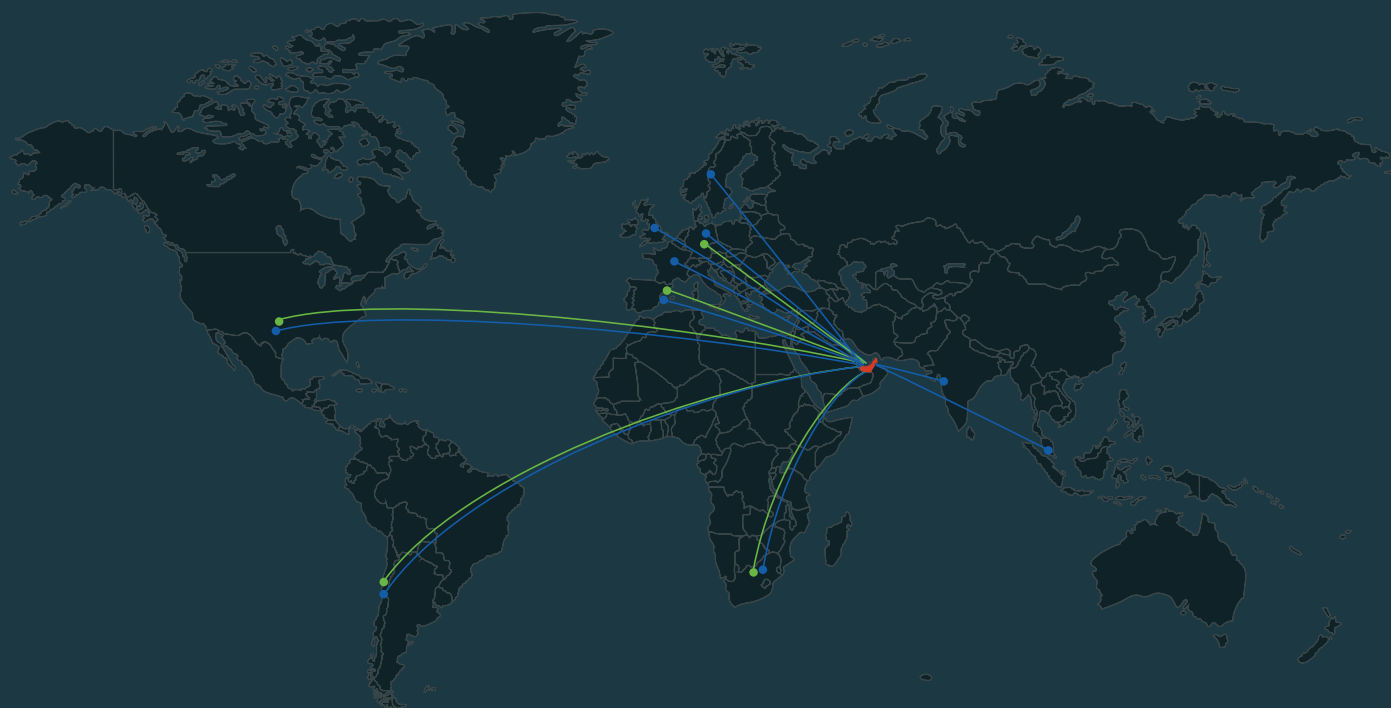
# Capacities C10 - C240

| Cell Type<br>Ue (100%) / VPC<br>Ref Temp | C10<br>1.80<br>25°C | C24<br>1.80<br>25°C | C48<br>1.80<br>25°C | C72<br>1.80<br>25°C | C100<br>1.85<br>25°C | C120<br>1.85<br>25°C | C240<br>1.85<br>25°C |
|--|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|
| 2 OPzV-ET 140SOLAR                       | 110                 | 126                 | 127                 | 139                 | 137                  | 141                  | 146                  |
| 3 OPzV-ET 210SOLAR                       | 165                 | 189                 | 190                 | 208                 | 205                  | 212                  | 218                  |
| 4 OPzV-ET 280SOLAR                       | 221                 | 252                 | 254                 | 278                 | 274                  | 282                  | 291                  |
| 5 OPzV-ET 350SOLAR                       | 278                 | 317                 | 320                 | 351                 | 345                  | 356                  | 367                  |
| 6 OPzV-ET 400SOLAR                       | 326                 | 371                 | 375                 | 410                 | 404                  | 417                  | 430                  |
| 5 OPzV-ET 500SOLAR                       | 403                 | 460                 | 464                 | 508                 | 500                  | 516                  | 532                  |
| 6 OPzV-ET 600SOLAR                       | 482                 | 550                 | 555                 | 608                 | 598                  | 618                  | 637                  |
| 7 OPzV-ET 700SOLAR                       | 560                 | 638                 | 644                 | 705                 | 694                  | 717                  | 739                  |
| 6 OPzV-ET 900SOLAR                       | 691                 | 739                 | 794                 | 870                 | 856                  | 884                  | 912                  |
| 7 OPzV-ET 1050SOLAR                      | 806                 | 862                 | 927                 | 1015                | 999                  | 1031                 | 1064                 |
| 8 OPzV-ET 1200SOLAR                      | 923                 | 987                 | 1061                | 1163                | 1144                 | 1181                 | 1218                 |
| 9 OPzV-ET 1350SOLAR                      | 1038                | 1111                | 1194                | 1308                | 1287                 | 1329                 | 1370                 |
| 10 OPzV-ET 1500SOLAR                     | 1149                | 1253                | 1322                | 1448                | 1425                 | 1471                 | 1517                 |
| 11 OPzV-ET 1600SOLAR                     | 1264                | 1378                | 1454                | 1593                | 1568                 | 1618                 | 1669                 |
| 12 OPzV-ET 1800SOLAR                     | 1379                | 1504                | 1586                | 1738                | 1710                 | 1766                 | 1821                 |
| 13 OPzV-ET 1950SOLAR                     | 1457                | 1588                | 1676                | 1836                | 1807                 | 1865                 | 1923                 |
| 11 OPzV-ET 1800SOLAR                     | 1433                | 1633                | 1648                | 1805                | 1776                 | 1834                 | 1891                 |
| 12 OPzV-ET 2000SOLAR                     | 1563                | 1782                | 1797                | 1969                | 1938                 | 2000                 | 2063                 |
| 13 OPzV-ET 2113SOLAR                     | 1698                | 1936                | 1953                | 2139                | 2105                 | 2173                 | 2241                 |
| 14 OPzV-ET 2300SOLAR                     | 1828                | 2084                | 2103                | 2304                | 2267                 | 2340                 | 2414                 |
| 15 OPzV-ET 2438SOLAR                     | 1959                | 2233                | 2253                | 2468                | 2429                 | 2508                 | 2586                 |
| 16 OPzV-ET 2600SOLAR                     | 2090                | 2382                | 2403                | 2633                | 2591                 | 2675                 | 2758                 |
| 17 OPzV-ET 2800SOLAR                     | 2220                | 2531                | 2553                | 2798                | 2753                 | 2842                 | 2931                 |
| 18 OPzV-ET 2970SOLAR                     | 2373                | 2706                | 2729                | 2990                | 2943                 | 3038                 | 3133                 |
| 19 OPzV-ET 3135SOLAR                     | 2505                | 2856                | 2881                | 3157                | 3107                 | 3207                 | 3307                 |
| 20 OPzV-ET 3300SOLAR                     | 2637                | 3006                | 3033                | 3323                | 3270                 | 3376                 | 3481                 |
| 21 OPzV-ET 3440SOLAR                     | 2768                | 3156                | 3183                | 3488                | 3433                 | 3543                 | 3654                 |
| 22 OPzV-ET 3600SOLAR                     | 2900                | 3306                | 3335                | 3654                | 3596                 | 3712                 | 3828                 |
| 23 OPzV-ET 3785SOLAR                     | 3032                | 3457                | 3487                | 3820                | 3760                 | 3881                 | 4002                 |
| 24 OPzV-ET 3950SOLAR                     | 3164                | 3607                | 3639                | 3987                | 3923                 | 4050                 | 4176                 |
| 25 OPzV-ET 4090SOLAR                     | 3296                | 3757                | 3790                | 4153                | 4087                 | 4219                 | 4351                 |
| 26 OPzV-ET 4250SOLAR                     | 3428                | 3908                | 3942                | 4319                | 4251                 | 4388                 | 4525                 |

## Cycles vs DOD



**A global leader in the industrial battery market providing world-class products for Motive Power and Reserve Power applications.**



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**Sales & service**

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