

ENERGYSTORE GEL SOLAR

Gel technology for renewable energy storage

Energystore value regulated lead-acid batteries for the solar power and renewable energy market. With an innovative Gel-Technology design Energystore ESPV batteries have a reliable maintenance-free and leakage-free construction.

Features:

- > High energy density and cyclic performance
- > Robust OPzV tubular positive electrode design, compliant with DIN 40742
- > >1500 cycles at 80% D.O.D at 20°C
- > Low self discharge rate allows for up to 2 years shelf life
- > Operating temperature -20°C to +45°C
- > EUROBAT design life: Long life > 10 years
- > Fully recyclable with low CO₂ footprint
- > Compliant with IEC 60896 - 21 / 22 / IEC 61427

Applications:

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

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

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Technical Data

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 ESPV- 280SOLAR	50	105	208	354	367	18.4	0.95	1650	274
5 ESPV-350SOLAR	50	126	208	354	367	22.2	0.78	2100	345
6 ESPV-400SOLAR	50	147	208	354	367	26.2	0.63	2550	405
5 ESPV-500SOLAR	70	126	208	471	484	30.7	0.63	2800	500
6 ESPV-600SOLAR	70	147	208	471	484	36.2	0.54	3400	599
7 ESPV-700SOLAR	70	168	208	471	484	41.7	0.46	4050	695
6 ESPV-900SOLAR	100	147	208	643	658	50.0	0.51	4350	852
8 ESPV-1200SOLAR	100	212	193	644	658	66.3	0.39	4550	1140
10 ESPV-1500SOLAR	100	212	235	646	658	81.7	0.33	6050	1428
12 ESPV-1800SOLAR	100	212	277	645	658	97.0	0.28	7600	1716
12 ESPV-2000SOLAR	125	212	277	796	809	111.9	0.25	8500	1940
16 ESPV-2600SOLAR	125	215	400	771	784	155.6	0.21	10500	2595
20 ESPV-3300SOLAR	125	214	489	769	784	190.1	0.16	13000	3274
22 ESPV-3600SOLAR	125	214	578	771	784	216.14	0.13	14600	3601
24 ESPV-3950SOLAR	125	214	578	771	784	226.2	0.11	16000	3928
26 ESPV-4250SOLAR	125	214	578	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 ESPV-280SOLAR	214	244	255	270	266	274	282
5 ESPV-350SOLAR	270	308	321	340	336	345	355
6 ESPV-400SOLAR	316	360	376	398	394	405	417
5 ESPV-500SOLAR	391	450	454	485	487	500	515
6 ESPV-600SOLAR	468	538	543	580	583	599	617
7 ESPV-700SOLAR	543	624	630	673	676	695	716
6 ESPV-900SOLAR	670	718	773	842	830	852	888
8 ESPV-1200SOLAR	895	958	1027	1131	1110	1140	1176
10 ESPV-1500SOLAR	1115	1212	1282	1380	1380	1428	1464
12 ESPV-1800SOLAR	1340	1462	1541	1660	1660	1716	1776
12 ESPV-2000SOLAR	1516	1713	1895	1986	1904	1940	1998
16 ESPV-2600SOLAR	2027	2270	2453	2574	2529	2595	2673
20 ESPV-3300SOLAR	2558	2865	3095	3249	3192	3274	3372
22 ESPV-3600SOLAR	2813	3151	3404	3573	3511	3601	3709
24 ESPV-3950SOLAR	3069	3437	3713	3898	3830	3928	4046
26 ESPV-4250SOLAR	3325	3791	4023	4223	4149	4255	4383

Vertical installation only

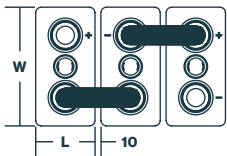
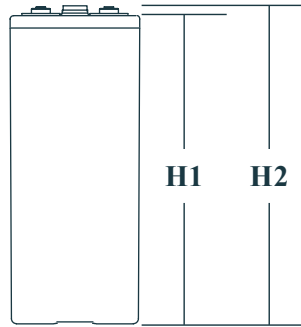
*For horizontal storage of cells please contact GNB

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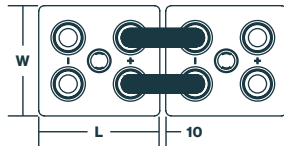
Technical Information

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

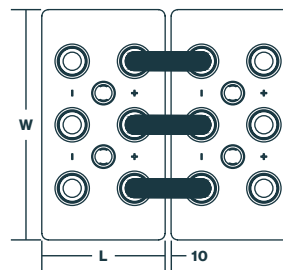
Not to scale



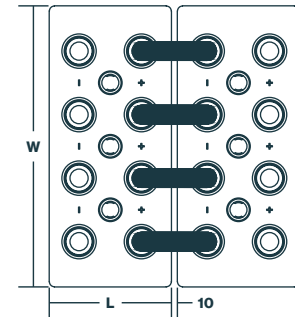
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6 ESPV- 900SOLAR



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Cycles vs DOD of ENERGYSTORE GEL SOLAR

