

Battery Range Summary

The EnerSys[®] range of PowerSafe[®] OPzS batteries has been designed for use in all standby power applications that demand the highest levels of reliability and security.

PowerSafe OPzS cells benefit from an optimised plate design that results in increased capacity compared to the requirements of the internationally recognised DIN standard. In addition, the flooded tubular plate technology offers excellent cycling performance together with a proven long life under float voltage conditions, for a truly flexible solution.

The specification of the PowerSafe OPzS cells make it ideal for a wide range of applications such as telecommunications, power generation and distribution, railway, airport and seaport signalling, computing, emergency lighting, automation and measuring systems.



Features & Benefits

- Capacity range: 216Ah – 3360Ah (C₁₀ /1.80Vpc/68°F/20°C)
- C₁₀ capacities exceed the DIN standard values
- Excellent cyclability
- 20 year design life (68°F/20°C)
- High operational reliability
- Low maintenance
- 3 year water topping-up interval
- DIN 40736-1 compliant

Construction

- Positive electrodes – die-cast tubular plates with low antimony lead alloy for longer life
- Negative electrodes – pasted flat plates provide perfect balance with the positive plates to give maximum performance
- Separators – special microporous material
- Containers – moulded from durable, transparent styrene acrylonitrile (SAN) to allow electrolyte level and cell condition to be monitored visually
- Cell lids – made of opaque ABS sealed to container to ensure no electrolyte leakage
- Electrolyte – diluted sulphuric acid with a specific gravity of 1.240 ±0.010 (maximum level) at 20°C/68°F for a fully charged cell

- Terminals – lead alloy leakproof pole with brass insert designed to give minimum resistance and maximum current flow
- Vent plugs – safety plugs equipped with flame arrestors. Special vent plugs allowing topping-up and S.G. reading without the need to remove them, are available on request
- Connectors – fully insulated, solid copper inter-cell connectors allow voltage measurements

Installation & Operation

- Float charge voltage: 2.23Vpc at 68°F/20°C
- Permissible operating temperature range: 14°F/-10°C to 113°F/+45°C

- Topping-up intervals of about 3 years in standby operation mode thanks to large electrolyte reserve
- Large selection of stands, including seismic stands, available upon request

Standards

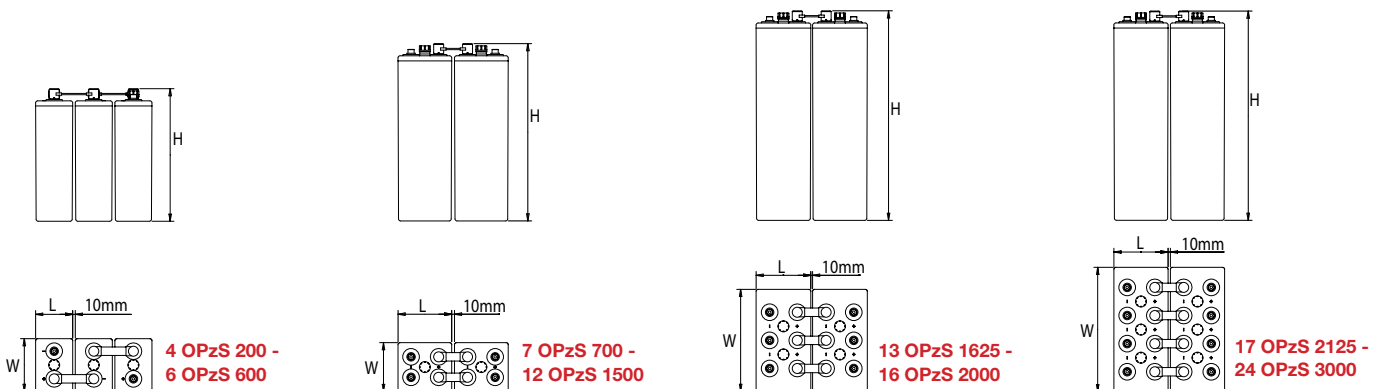
- Compliant with both the international standard IEC 60896-11 and the DIN standard 40736-1
- Batteries must be installed in accordance with IEC 62485-2 and national/local regulations
- The management systems governing the manufacture of PowerSafe® OPzS products are ISO 9001, ISO 14001 and ISO 45001 certified

General Specifications

Cell Type	Nominal Ah Capacity	Nominal Dimensions						Weight - Volumes					
		Length		Width		Height		Unpacked		Electrolyte only 1.240 S.G.			
		in	mm	in	mm	in	mm	lbs	kg	lbs	kg	gal	liters
4 OPzS 200	217	4.1	103	8.1	206	15.9	403	37.8	17.2	10.6	4.8	1.0	3.9
5 OPzS 250	266	4.9	124	8.1	206	15.9	403	45.8	20.8	13.4	6.1	1.3	4.9
6 OPzS 300	319	5.7	145	8.1	206	15.9	403	53.5	24.3	15.8	7.2	1.5	5.8
5 OPzS 350	388	4.9	124	8.1	206	20.5	520	59.2	26.9	18.3	8.3	1.8	6.7
6 OPzS 420	466	5.7	145	8.1	206	20.5	520	69.3	31.5	21.8	9.9	2.1	8.0
7 OPzS 490	543	6.5	166	8.1	206	20.5	520	79.4	36.1	25.4	11.5	2.5	9.3
6 OPzS 600	648	5.7	145	8.1	206	27.4	695	98.6	44.8	30.3	13.7	2.9	11.1
7 OPzS 700	798	8.3	210	7.5	191	27.4	695	126.7	57.6	40.4	18.3	3.9	14.8
8 OPzS 800	856	8.3	210	7.5	191	27.4	695	134.9	61.3	39.6	18.0	3.8	14.5
9 OPzS 900	1013	8.3	210	9.2	233	27.4	695	156.0	70.9	50.2	22.8	4.9	18.4
10 OPzS 1000	1071	8.3	210	9.2	233	27.4	695	164.1	74.6	49.4	22.4	4.8	18.1
11 OPzS 1100	1227	8.3	210	10.8	275	27.4	695	185.7	84.4	56.8	25.8	5.5	20.8
12 OPzS 1200	1293	8.3	210	10.8	275	27.4	695	193.6	88.0	56.2	25.5	5.4	20.6
11 OPzS 1375	1631	8.3	210	10.8	275	33.3	845	239.8	109.0	75.4	34.2	7.3	27.6
12 OPzS 1500	1730	8.3	210	10.8	275	33.3	845	251.5	114.3	74.5	33.8	7.2	27.3
13 OPzS 1625	1969	8.4	214	15.7	399	32.3	820	308.0	140.0	108.1	49.0	10.5	39.6
14 OPzS 1750	2092	8.4	214	15.7	399	32.3	820	316.8	144.0	108.1	49.0	10.5	39.6
15 OPzS 1875	2208	8.4	214	15.7	399	32.3	820	327.8	149.0	106.2	48.2	10.3	38.9
16 OPzS 2000	2307	8.4	214	15.7	399	32.3	820	333.3	151.5	106.5	48.3	10.3	39.0
17 OPzS 2125	2546	8.3	212	19.2	487	32.3	820	396.0	180.0	132.4	60.1	12.8	48.5
18 OPzS 2250	2669	8.3	212	19.2	487	32.3	820	404.8	184.0	130.5	59.2	12.6	47.8
19 OPzS 2375	2785	8.3	212	19.2	487	32.3	820	415.8	189.0	129.7	58.8	12.5	47.5
20 OPzS 2500	2884	8.3	212	19.2	487	32.3	820	424.6	193.0	130.0	58.9	12.6	47.6
22 OPzS 2750	3238	8.3	212	22.7	576	32.3	820	495.0	225.0	157.8	71.6	15.3	57.8
24 OPzS 3000	3543	8.3	212	22.7	576	32.3	820	515.9	234.5	154.0	69.8	14.9	56.4

Notes: (1) Height shown is overall height, including connectors and shrouds (2) Typical electrolyte volume for filling cells (1.280 SG electrolyte at 68°F/20°C)

Typical Outline Drawings



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