



OPzV Solar

VRLA Gel Deep Cycle Batteries

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

ReFortis valve regulated lead-acid batteries for the solar power and renewable energy market. With an innovative Gel-Technology design ReFortis 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 CO2 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**

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
RE OPzV 140SOLAR	50	103	206	354	367	10.5	0.98	825	141
RE OPzV 210SOLAR	50	103	206	354	367	15.3	0.96	1238	212
RE OPzV 280SOLAR	50	103	206	354	367	18.4	0.95	1650	282
RE OPzV 350SOLAR	50	124	206	354	367	22.2	0.78	2100	356
RE OPzV 400SOLAR	50	145	206	354	367	26.2	0.63	2550	417
RE OPzV 500SOLAR	70	124	206	471	484	30.7	0.63	2800	516
RE OPzV 600SOLAR	70	145	206	471	484	36.2	0.54	3400	618
RE OPzV 700SOLAR	70	166	206	471	484	41.7	0.46	4050	717
RE OPzV 900SOLAR	100	145	206	643	656	50.0	0.51	4350	884
RE OPzV 1050SOLAR	100	145	206	643	656	53.0	0.51	4450	1031
RE OPzV 1200SOLAR	100	210	191	644	657	66.3	0.39	4550	1181
RE OPzV 1350SOLAR	100	210	233	646	659	78.0	0.39	5445	1329
RE OPzV 1500SOLAR	100	210	233	646	659	81.7	0.33	6050	1471
RE OPzV 1600SOLAR	100	210	275	645	658	92.0	0.28	6967	1618
RE OPzV 1800SOLAR	100	210	275	645	658	97.0	0.28	7600	1766
RE OPzV 1800SOLAR	125	210	275	796	809	102.0	0.25	7792	1834
RE OPzV 2000SOLAR	125	210	275	796	809	111.9	0.25	8500	2000
RE OPzV 2113SOLAR	125	210	275	796	809	116.0	0.24	8531	2173
RE OPzV 2300SOLAR	125	214	399	771	784	145.8	0.24	9188	2340
RE OPzV 2438SOLAR	125	214	399	771	784	150.0	0.22	9844	2508
RE OPzV 2600SOLAR	125	214	399	771	784	155.6	0.21	10500	2675
RE OPzV 2800SOLAR	125	214	399	771	784	156.0	0.21	11050	2842
RE OPzV 2970SOLAR	125	214	399	771	784	165.0	0.19	11700	3038
RE OPzV 3135SOLAR	125	212	487	769	782	187.6	0.17	12350	3207
RE OPzV 3300SOLAR	125	212	487	769	782	190.1	0.16	13000	3376
RE OPzV 3440SOLAR	125	212	575	771	784	214.0	0.15	13936	3543
RE OPzV 3600SOLAR	125	212	575	771	784	216.4	0.13	14600	3712
RE OPzV 3785SOLAR	125	212	575	771	784	223.6	0.12	15333	3881
RE OPzV 3950SOLAR	125	212	575	771	784	226.2	0.11	16000	4050
RE OPzV 4090SOLAR	125	212	575	771	784	233.3	0.11	16635	4219
RE OPzV 4250SOLAR	125	212	575	771	784	236.0	0.11	17300	4388

Horizontal installation possible up to 12 RE OPzV 1800SOLAR *For horizontal storage of cells larger than 12 RE OPzV 1800SOLAR please contact ReFortis

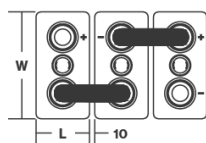
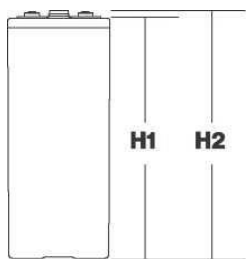
V0 option available

H1: Height over lid

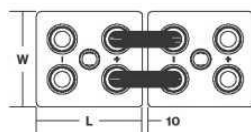
H2: Height over pillar

M10 threaded terminal Torque: 23Nm

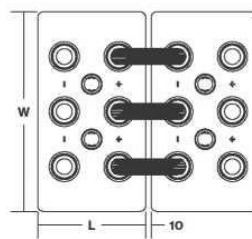
Not to scale



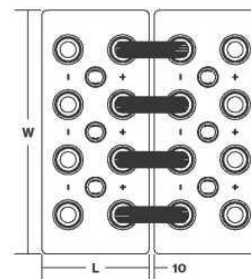
OPzV-RFT 140SOLAR to
OPzV-E1050SOLAR



OPzV-RFT 1200SOLAR to
OPzV-RFT 2100SOLAR



OPzV-RFT 2300SOLAR to
OPzV-RFT 2970SOLAR



OPzV-RFT 3135SOLAR to
OPzV-RFT 4250SOLAR

Capacities C10 - C240

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

Cycles vs DOD

Cycles life of RE OPZVSOLAR @20°C

