



# PowerSafe® VGM

Renewables, Telecommunications and Utility

## Battery Range Summary

The pocket plate design, combined with the Nickel-cadmium (NiCd) chemistry and valve regulated technology, places the PowerSafe® VGM in the lead with low maintenance batteries. The Ni-Cd chemistry provides exceptionally long life at extreme temperatures while the inherent extremely low maintenance feature is enhanced by the valve regulated design. Qualities which unquestionably make the Ni-Cd series of batteries an ideal choice for mixed load applications.

The robust design provides an excellent resistance against electrical and mechanical stress, low risk of terminal degradation and a proven 20 plus year life. This combination along with proven use in service make the PowerSafe VGM battery the right choice for industrial applications, proven reliability and the highest safety integrity. The PowerSafe VGM battery series covers discharges of 30 to 120 minutes.

### Features and Benefits

- Capacity range 11-1350Ah
- Single one piece container construction
- Ni-Cd pocket plate design
- Long storage and shelf life
- Wide operating temperature
- Low risk of terminal degradation
- Translucent plastic case for visible electrolyte level verification
- Proven 20 plus year service life



## Construction

- Robust construction means low risk of terminal degradation
- Plate lugs are connected to post by bolting or welding
- Dilute potassium hydroxide electrolyte
- Felt separators insulate plates and improve recombination rates
- Dual post seal design minimizes carbon formation
- Single one piece container construction
- Flame arresting low Pressure Relief Valve (PRV)

## Installation and Operation

- Extremely low watering requirements over normal service lifetime
- Low maintenance technology with recombination rates up to 90%
- Cells can be stored for long durations without damage
- Translucent case allows for electrolyte level verification
- Proven long service life with 20 years in stationary cycling operations
- Operating temperature: -22°F (-30°C) to 122°F (50°C)  
Recommended temperature: 32°F (0°C) to 104°F (40°C)

## Standards

- Conforms to IEC 62259
- The management systems governing the manufacture of this product are ISO 9001:2008 and ISO 14001:2004 certified

## General Specifications

Cell Type	Nominal Ah Capacity*	Nominal Dimensions						Weight	
		Length mm		Width mm		Height mm		Unpacked lbs	kg
VGM 11	11	1.8	46	3.3	85	6.6	167	2.3	1.0
VGM 18	18	1.8	46	3.3	85	9.3	237	3.3	1.5
VGM 24	24	1.8	46	3.3	85	9.3	237	3.5	1.6
VGM 30	30	1.8	46	3.3	85	9.3	237	3.8	1.7
VGM 40	40	3.3	85	3.3	85	9.3	237	5.9	2.7
VGM 48	48	3.3	85	3.3	85	9.3	237	6.2	2.8
VGM 55	55	3.3	85	3.3	85	9.3	237	6.5	2.9
VGM 65	65	2.1	53	5.3	134	14.3	364	10.7	4.9
VGM 75	75	2.1	53	5.3	134	14.3	364	11.0	5.0
VGM 90	90	2.7	69	5.3	134	14.3	364	13.2	6.0
VGM 110	110	2.7	69	5.3	134	14.3	364	13.9	6.3
VGM 125	125	2.8	70	6.5	164	14.3	364	16.9	7.7
VGM 140	140	2.8	70	6.5	164	14.3	364	17.3	7.8
VGM 160	160	4.3	108	6.5	164	14.3	364	22.9	10.4
VGM 185	185	4.3	108	6.5	164	14.3	364	23.8	10.8
VGM 205	205	4.3	108	6.5	164	14.3	364	24.4	11.1
VGM 225	225	4.3	108	6.5	164	14.3	364	25.6	11.6
VGM 250	250	4.3	108	6.5	164	14.3	364	26.9	12.2
VGM 270	270	6.5	164	6.2	158	14.3	364	34.8	15.8
VGM 300	300	6.5	164	6.2	158	14.3	364	36.4	16.5
VGM 320	320	6.5	164	6.2	158	14.3	364	37.5	17.0
VGM 340	340	6.5	164	6.2	158	14.3	364	38.6	17.5
VGM 355	355	6.5	164	6.2	158	14.3	364	39.7	18.0
VGM 380	380	6.5	164	6.2	158	14.3	364	40.8	18.5
VGM 400	400	6.5	164	6.2	158	14.3	364	41.7	18.9
VGM 450	450	6.9	176	9.7	246	15.0	382	60.2	27.3
VGM 470	470	6.9	176	9.7	246	15.0	382	61.2	27.8
VGM 500	500	6.9	176	9.7	246	15.0	382	62.3	28.3
VGM 520	520	6.9	176	9.7	246	15.0	382	63.6	28.9
VGM 550	550	6.9	176	9.7	246	15.0	382	64.5	29.3
VGM 570	570	6.9	176	9.7	246	15.0	382	65.3	29.7
VGM 600	600	6.9	176	14.5	368	15.0	382	89.5	40.7
VGM 630	630	6.9	176	14.5	368	15.0	382	90.6	41.2
VGM 675	675	6.9	176	14.5	368	15.0	382	92.2	41.9
VGM 690	690	6.9	176	14.5	368	15.0	382	93.1	42.3
VGM 750	750	6.9	176	14.5	368	15.0	382	94.8	43.1
VGM 770	770	6.9	176	14.5	368	15.0	382	96.4	43.8
VGM 800	800	6.9	176	17.6	448	15.0	382	108.0	49.1
VGM 850	850	6.9	176	17.6	448	15.0	382	113.1	51.4
VGM 950	950	6.9	176	17.6	448	15.0	382	118.1	53.7
VGM 1000	1000	6.9	176	17.6	448	15.0	382	126.7	57.6
VGM 1030	1030	6.9	176	17.6	448	15.0	382	129.6	58.9
VGM 1130	1130	6.9	176	17.6	448	15.0	382	136.2	61.9
VGM 1250	1250	6.9	176	22.0	558	15.0	382	151.6	68.9
VGM1350	1350	6.9	176	22.0	558	15.0	382	154.2	70.1

\*Nominal amp hour capacity at the 5 hour rate to 1.15 volts per cell @ 68°F (20°C)



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