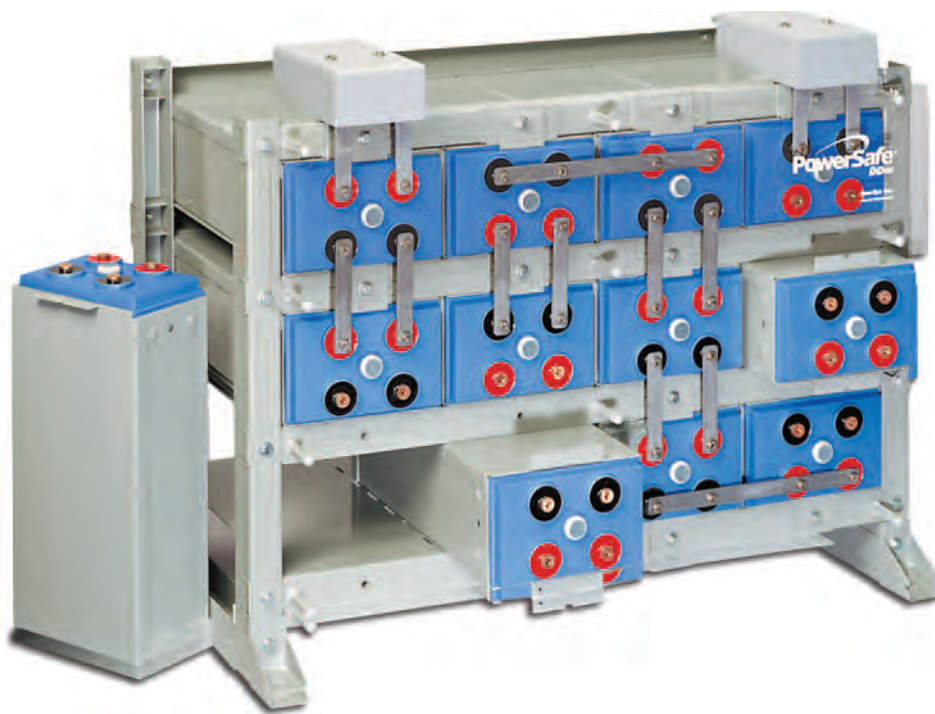




**PowerSafe**<sup>®</sup>  
DDm

## Battery Range Summary

Seismic Stand Configuration



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**EnerSys**<sup>®</sup>  
Power/Full Solutions

RESERVE  
POWER

The PowerSafe® DDm range offers an ideal solution for large capacity valve regulated lead acid battery requirements. PowerSafe DDm's steel container design concept, with its integral racking system, provides a cost effective battery system with a compact, quick and simple installation process.

The PowerSafe DDm battery system's cutting-edge technology incorporates an enhanced cell design with thick positive plate for long life and a superior racking system. The welded/epoxy, dual pillar seal design provides a high integrity seal and the large copper pillar design enhances high rate performances.

Cells are encased in dedicated protective steel containers that maintain constant and uniform compression for the life of the cell. The easy to assemble racking system provides total flexibility for system configuration and allows fast and simple installation, even in the most difficult locations.

PowerSafe DDm, with its optimised recombination technology and extra thick plates, provides excellent performance and service life across a wide range of applications including telecommunications, power generation/distribution and UPS.

## Features and Benefits

- 100% "out of the box" initial battery capacity
- Proven VRLA AGM technology
- Up to 2000 Ah in a single cell
- Classified as "Very Long Life" (> 12 years) according to the Eurobat Guide 2015
- Stand design allows for maximum heat dissipation
- Certified to 1997 UBC Zone 4 to six high on DDm125 sizes and eight high on all other sizes
- Module design. 2 and 4 volt modules available
- System can be configured 2, 3, 4 or 6 cells wide in single cell modules; 2, 4 or 6 cells wide in 2-cell modules for maximum flexibility
- Easy installation
- Top termination supplied as standard
- Clear flame retardant safety shields allow for easy visual inspection without removal

## Construction

- Positive plate - Thick 6.4mm lead-tin-calcium grids minimise corrosion and prolong life
- Negative plate - Balanced lead-calcium plates optimise recombination efficiency
- AGM separator - Mechanically strong, low electrical resistance, microporous glass fibre completely absorbs the electrolyte into its structure
- Container - Flame retardant polypropylene (UL94 V-0/L.O.L. 28%)
- Container are single-piece construction
- Electrolyte - Dilute sulphuric acid
- Terminal pillar - Cast lead terminal. Threaded copper insert, with large surface area, to provide maximum conductivity
- Pillar seal - Ring burn with secondary epoxy resin seal is 100% water bath tested in the factory and proven in service
- Relief valve - Operates at 2-3 psi and is complete with integral flame arrestor

## Benefits of the Steel Container Design

- Ease of installation. Simply set up rack and install modules
- Uniform and consistent compression
- "Designed-in" thermal management allows maximum air flow
- Flexible configuration
- Cell protected from damage during transport

## Installation

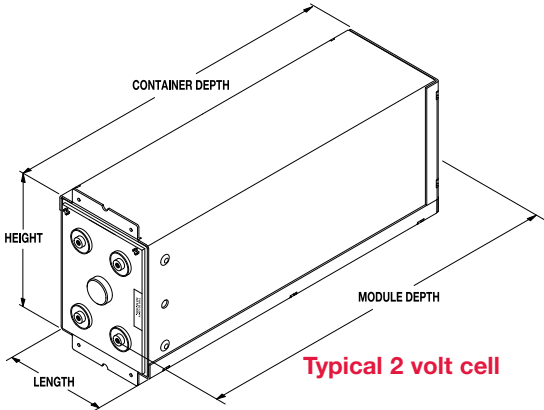
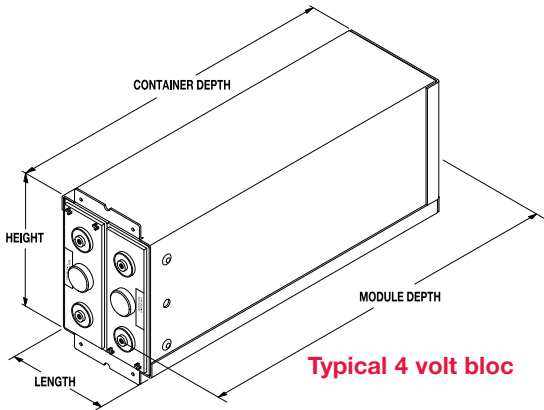
- Easy to install modules
- Flexible configuration - 2, 3, 4 or 6 cells wide in single cell modules or 2, 4 or 6 cells wide in 2-cell modules
- Total front access for easy maintenance
- Floor anchoring - easy access during install, rack can be set before stowing modules
- Top termination as standard - optional side termination available
- Transition kits available
- Grounding kits available for bonding of all steel components

# Battery Range Summary

## General Specifications

PowerSafe® DDm Battery Type	Nominal Voltage (V)	Cells per Module	Nominal Capacity (Ah)	Nominal Dimensions (mm)				Typical Weight (kg)	Internal Resistance (micro-Omhs)	Short Circuit Current (Amps)
			10 hr rate to 1.80Vpc @ 20°C	Length	Height	Depth (container)	Depth (module)			
2DDm50-09	4	2	202	188	165	333	366	34.3	825	2527
2DDm50-13	4	2	303	265	165	333	366	49.5	550	2791
DDm50-17	2	1	404	176	165	333	366	34.0	413	5048
2DDm85-13	4	2	498	265	165	519	554	75.7	515	4049
2DDm85-15	4	2	582	303	165	519	554	88.5	441	4728
DDm85-21	2	1	831	214	165	519	554	64.5	309	6748
DDm85-25	2	1	997	252	165	519	554	74.4	258	8081
DDm85-27	2	1	1080	271	165	519	554	80.8	238	8761
DDm85-33	2	1	1330	328	165	519	554	97.9	193	17803
DDm100-21	2	1	975	214	165	590	624	73.5	270	7722
DDm100-25	2	1	1170	252	165	590	624	86.5	225	9267
DDm100-27	2	1	1270	271	165	590	624	92.0	208	10024
DDm100-33	2	1	1560	328	165	590	624	115.3	169	12337
DDm125-25	2	1	1490	252	226	562	597	112.3	168	12411
DDm125-27	2	1	1610	271	226	562	597	120.8	155	13452
DDm125-33	2	1	1980	328	226	562	597	144.1	126	16548

## Outline Drawings



## System Configurator

PowerSafe® DDM Battery Type	Nominal Voltage (V)	Cells per module	Nominal Row Height (mm)	Nominal Stack Depth (mm)	Nominal Stack Length (mm)				Typical Module Weight <sup>(1)</sup> (kg)	
					2 Wide Module	3 Wide Module	4 Wide Module	6 Wide Module	Unpacked	Packed
2DDm50-09	4	2	219.2	412.8	401 <sup>(2)</sup>	N/A	468	658	42.6	45.6
2DDm50-13	4	2	219.2	412.8	477 <sup>(2)</sup>	N/A	620	887	59.0	62.0
DDm50-17	2	1	219.2	412.8	442	619	791	1145	39.9	41.4
2DDm85-13	4	2	219.2	596.9	477 <sup>(2)</sup>	N/A	620	887	87.2	90.2
2DDm85-15	4	2	219.2	596.9	515 <sup>(2)</sup>	N/A	696	1001	100.8	103.8
DDm85-21	2	1	219.2	596.9	517	732	944	1412	72.1	73.6
DDm85-25	2	1	219.2	596.9	594	846	1096	1640	83.0	84.5
DDm85-27	2	1	219.2	596.9	632	904	1173	1755	90.3	91.8
DDm85-33	2	1	219.2	596.9	746	1075	1401	2098	111.1	112.6
DDm100-21	2	1	219.2	666.8	517	732	944	1412	83.9	85.4
DDm100-25	2	1	219.2	666.8	594	846	1096	1640	99.3	100.9
DDm100-27	2	1	219.2	666.8	632	904	1173	1755	107.1	108.6
DDm100-33	2	1	219.2	666.8	746	1075	1401	2098	130.2	131.7
DDm125-25	2	1	279.4	698.5	622	871	1127	1668	122.0	123.5
DDm125-27	2	1	279.4	698.5	660	928	1203	1784	131.5	133.3
DDm125-33	2	1	279.4	698.5	774	1099	1432	2126	161.0	162.5

<sup>(1)</sup> Includes hardware for calculating system weight

<sup>(2)</sup> Standard top termination not available, stack length is with same side termination

### System Dimensions Formula

System height = (row height x no. of cell high) + 229mm

System length = stack length x no. of stacks

System weight = module weight x no. of modules

#### Example A: 24 x DDm85-21

4 modules wide per stack x 6 modules high per stack

System height = (219.2mm x 6) + 229mm = 1,544.2mm

System length = 944mm x 1 = 944mm

System weight = 72.1kg x 24 = 1,730.4kg

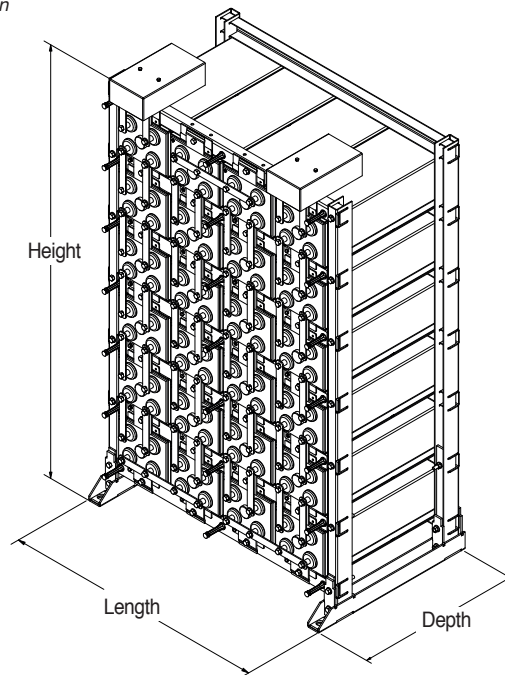
#### Example B: 240 x DDm125-25

4 modules wide per stack x 6 modules high per stack

System height = (279.4mm x 6) + 229mm = 1,905.4mm

System length = 1127mm x (240 ÷ 24) = 11,270mm

System weight = 122.0kg x 240 = 29,280.0kg



### Terminal Location

Not all locations are possible for all configurations.

