



PowerSafe® EC-M

Switchgear, Telecommunications and Utility

Battery Range Summary



Engineered to meet the requirements of the power industry, the features inherent to the PowerSafe® EC-M battery make it one of the best in the market. The EC-M battery features calcium plates which demonstrate maximized performance in long discharge applications and reduce watering requirements. Extra thick positive grids allow for longer watering intervals and enable the EC-M batteries to be offered with 100% initial capacity.

Standard features like thick positive plates ensure excellent long discharges while the large double hole post provides a stronger intercell connection, assuring maximum electrical integrity. The lead calcium grids also help reduce watering requirement intervals. The EC-M series includes a Slide-Lock™ post seal, which allows for natural plate growth over the life of the battery without compromising the seal between the post and the cover. The innovative tongue-and-groove jar-to-cover seal provides reliability with a robust airtight seal.

Completing the design are copper post inserts, which enhance high rate performance making the EC-M battery a leader in the industry.

Features and Benefits

- Capacity range 215 - 850Ah
- Lead-calcium alloy
- Reduced watering requirements
- Standard Styrene Acrylonitrile (SAN) jar with flame retardant UL94 V-0 PVC cover; flame retardant jar available
- Thick positive plates maximize performance in long discharge applications
- 20 year life expectancy in float service at 77°F (25°C) ambient temperature

Construction

- 0.34" thick positive plates provide excellent long discharge rates and long life
- Negative plate design enhances high rate performance
- Separator – microporous rubber with "Vitrex" glass fiber retainers
- Standard jar material Styrene Acrylonitrile (SAN) with flame retardant PVC optional. Cover is flame retardant UL94 V-0 PVC
- Electrolyte – dilute sulfuric acid with specific gravity of 1.215 (1.250 available upon request)
- Copper inserted posts
- Slide-Lock™ post seal design
- Flame arrestors – included for increased operational safety

Installation and Operation

- Tin plated copper inter-cell connectors (standard); lead plated optional
- Dual posts for high current carrying capability (EC-15M and above)
- Excellent long discharge and complex duty cycle capability for switchgear applications
- 20 year life expectancy in float service at 77°F (25°C)
- Post design features low resistance copper inserts for high rate performance
- Operating temperature: 32°F (0°C) to 104°F (40°C)
Recommended temperature: 68°F (20°C) to 86°F (30°C)

Standards

- 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 - Volumes					
		Length**		Width		Height		Unpacked		Electrolyte only 1.215 S.G.			
		in	mm	in	mm	in	mm	lbs	kg	lbs	kg	gal	liters
EC-5M	215	5.1	130	11.0	279	18.7	475	60.9	27.7	20.9	9.5	2.1	7.8
EC-7M	290	5.1	130	11.0	279	18.7	475	71.9	32.7	18.9	8.6	1.9	7.1
EC-9M	365	5.1	130	11.0	279	18.7	475	82.7	37.6	16.9	7.7	1.7	6.4
EC-11M	470	6.6	168	11.0	279	18.7	475	103.8	47.2	24.0	10.9	2.4	9.0
EC-13M	525	6.6	168	11.0	279	18.7	475	113.7	51.7	20.0	9.1	2.0	7.5
EC-15M	620	8.1	206	11.0	279	18.7	475	139.7	63.5	29.0	13.2	2.9	10.8
EC-17M	670	8.1	206	11.0	279	18.7	475	149.6	68.0	26.8	12.2	2.7	10.1
EC-19M	795	10.1	257	11.0	279	18.7	475	175.6	79.8	37.0	16.8	3.7	13.8
EC-21M	850	10.1	257	11.0	279	18.7	475	186.6	84.8	35.9	16.3	3.6	13.5

* Nominal Ah capacity is based on an 8 hour rate to 1.75 volts per cell @ 77°F (25°C).

** 0.25" must be added between cells for spacing purposes when calculating total battery length.

