



PowerSafe® EC-M

Switchgear, Telecommunications and Utility

Battery Range Summary



Engineered to meet industrial requirements, the features inherent to the PowerSafe® EC-M battery make it one of the best in the market. The EC-M battery features specially designed PbCa 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; PC flame retardant jar and cover are optional
- 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 cover. PC flame retardant jar and cover are optional.
- 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.

