

EnerSys RAPP Notes

(Reserve & Portable Power)

I have heard that Genesis® pure lead batteries are offered in an EP version and an XE version. How do I know which one to choose for my application?



To correctly choose the Genesis® version, you must first ask yourself a few questions about the application.

- *Will it be in a high temperature environment?*
- *Will the battery be subjected to high levels of vibration?*
- *If it is a float (emergency backup power) application, what kind of float life will I be expecting from the battery?*

Once these questions are answered, the following table may be consulted to help decide which Genesis® version to use. For example, if you know that the battery will be exposed to 80°C (176°F) then you should select the XE version.

Similarly, the XE battery must be chosen if tolerance to high levels of vibration is a requirement, or if your emergency backup power design calls for a battery with a life expectancy of more than ten (10) years.

To help you make the selection process easier, application features that mandate an XE selection are **boldfaced** in red in the table below.

This newsletter is scheduled to come out once every quarter and we invite our readers to send in their battery application questions and concerns. Please send them in to kalyan.jana@enersysinc.com and put in **EnerSys RAPP Notes question** in the subject line.



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<i>Feature</i>	<i>Genesis® EP</i>	<i>Genesis® XE</i>
Technology	Pure lead-tin AGM	
Float life @ 25°C (77°F)	10 years @ 2.27 VPC charge	12+ years @ 2.27 VPC charge
Cycle life @ 100% DOD	400	
Shock & vibration tolerance	Good	<ul style="list-style-type: none"> • Meets MIL Std. 8565 • Better by 20% - 50%
Operating temperature range	<ul style="list-style-type: none"> • -40°C to +45°C • -40°C to +60°C with metal jacket (denoted EPX) 	<ul style="list-style-type: none"> • -40°C to +45°C • -40°C to +80°C with metal jacket (denoted XEX)
Shelf life @ 25°C (77°F)	2 years from fully charged state down to 12V per block	
Capacity @ 10-hr. rate	100% (taken as reference)	≈ 95%
Weight	100% (taken as reference)	≈ 105%
Dimensions	Same footprint	
Quick charge	6C to 8C charge acceptance at room temperature	
Overdischarge abuse tolerance	Exceeds DIN standard for overdischarge recovery	
High-rate discharge	100% (taken as reference)	≈ 95%
Flame retardant rating	V-0 rated case and cover	
Shipping	Air shippable with no restrictions	

