

Description of Load	Watts	х	Hours per Day	=	Watt Hours / Day
Totals					

1)	Total Watt Hours / Day x 1.1 for Inverter Inefficiency	
2)	Divide by Battery Voltage	
3)	Result = Amp Hours per Day	
4)	Multiply Line 3 by 1.2 for Battery Inefficiency	
5)	Actual Amp Hours per Day Required	
6)	Divide Line 5 by 0.5 as Batteries should not cycle more than 50%	
7)	Days of Battery Autonomy Needed	
8)	Multiply Line 6 by Line 7 = Battery Capacity Required	

Instructions:

Divide Total Watt Hours/Day by Sun Hours. This will equal the Wattage Output of the PV Array. Configure Batteries in Series and or Parallel Strings to achieve Line 8 (Battery Capacity Required) at the Nominal Rated Battery Voltage.

