



Welcome to the RefurbUPS.com UPS sizing calculation guide. If you would like one of our power protection experts to prepare a quote for a suitable solution, please email us at info@RefurbUPS.com or call us at (845) 357-6911.

You'll need a UPS with enough capacity to handle the full load, as well as a battery system (either internal or with additional external extended run-time battery packs) that can support that load for long enough to restore power or safely shut down your systems. Expected growth and redundancy requirements should also be considered. Let's go through the calculation below:

1. Make a list of all the equipment that will be plugged into the UPS.
2. Read the nameplate on each piece of equipment and write down the voltage and amperage. For each piece of equipment, multiply the voltage and the amperage to get the VA rating.

Note: If your equipment is rated in watts, simply convert it to VA by dividing the wattage rating by the equipment's power factor, which is typically 1 for most networking equipment.

3. Add all the VA ratings together to get the total VA requirement for the equipment plugged into the UPS.
4. To account for growth, you will need a UPS with greater VA capacity than the total VA requirement from step 3. RefurbUPS recommends at minimum 25% growth to be expected, though if you have a forecasted expansion you may need a larger percentage to cover your plans for growth.

5. Multiply the initial VA requirement from step 3 by 1.25 (Note that the .25 is to account for 25% growth).
Note: Adjust this calculation for other rates of growth by changing the digits after the decimal.

Equipment	Amps	x	Volts	=	VA	x	Quantity	=	VA Subtotal
		x		=		x		=	
		x		=		x		=	
		x		=		x		=	
		x		=		x		=	
		x		=		x		=	
		x		=		x		=	
		x		=		x		=	
		x		=		x		=	
									Total
									1.25
									Grand Total