

## FAQ Glossary for Direct UPS

Basic formula:

$$V = I (a) \times R,$$

$$\text{Power} = V \times A = VA,$$

$$\text{Watt} = P.F. \times VA$$

1. V (Voltage): Electrical pressure  
In USA, V = 120; In other countries such as Europe, V = 240
2. I (Electrical current)
3. A (Amp or Ampere)
4. Current: Electrons in motion, or speed of electron
5. R (Resistance)
6. VA = V x A: UPS sized by VA
7. W (Watt): Unit of Power  
In DC: Power = Watt = VA; In AC: Watt = P.F. x VA
8. AC: (Alternating Current) is the type of current found in a wall outlet.  
You plug any DVR, TV, and PC into AC.
9. DC (Direct Current): Batteries provide DC
10. AVR (Automatic Voltage Regulator): Adjust incoming voltage by using boost & buck function. Direct UPS VP serial and JP X serial have this device.
11. P.F. (Power factor): The ratio of power between AC and DC.  
P.F. = Watt/VA
12. Transformer: a mechanical device used to increase or decrease voltage
13. Power: how quick work can be done, Power is measure by Watt.

## How to diagnose the UPS Problem---VP Series

Here are the audible alarms for the UPS:

- A. Back up mode: Sounding every 10 seconds
- B. Battery low: Sounding every one second
- C. Overload: Sounding every 0.5 seconds
- D. Battery Replace: Sounding every 2 seconds
- E. Fault: Continuous sounding

What does the alarm type signify?

- A. It means that the UPS is turned on without AC power.  
You should check the input of the UPS.
- B. It means that the UPS is turned on without AC power and battery capacity is low.
- C. It means that the load is too big for the UPS.
- D. It means that the battery failed.
- E. It means that the UPS failed to operate.