



V-GUARD BUYING GUIDE – DUPS, INVERTERS

While weather is something that is not under our control, we do depend on electricity to control our surrounding/indoor temperature and make-up for the unpredictability of the weather.

The one catalyst that plays spoilsport in the Weather-Electricity equation is power supply! Just when you need that fan or that heater working, the power goes off leaving you to deal with the weather all by yourself.

Playing saviour during such times is an Inverter. A technology that basically converts Direct Current (DC) into Alternating Current (AC), an inverter supplies electricity (when the power is down) to your home/office. Buying & installing an inverter may require a lot of technical know-how and just for that, we present to you an Inverter Buying Guide that will help you in your purchase decision.

Power-Packed

Before deciding on an inverter you need to calculate a rough estimate of the power requirement of your home. If you are pretty tech-savvy and your house is full of gadgets and appliances, it is practically impossible for an inverter to support all the appliances at once.

To help you understand which appliance consumes just how much electricity, below is a table indicating the Wattage requirement of electric appliances.

Appliances	Watts
Lamps (Bulbs)	5-100
Lamps (CFL)	5-50
LED Lights	3-30
Tube Lights	40
Fans	50 – 150
Television (Plasma, LCD)	100 – 300
Refrigerator	150 – 450
Window Air Conditioner	1000 – 2250
Split Air Conditioner	900 – 2000
Washing Machine (Semi/Fully Automatic)	150 – 3000
Water Heater/Geaser	1000 – 2000



Mixer Grinder	500-800
Induction Cooktop	1500-3000
Microwave Oven	2000-3000
Toaster	1000
Electric Cooker	3000
Air Cooler	350
Vacuum Cleaner	1500
Electric/Steam Iron	600-1500
Desktop Computer	100-300
Audio System (5.1 Music System)	500
Printers (DMP/Inkjet/Laser)	100 – 350
Scanners (Average One)	35
Fax Machine	120
Room Heaters	2000
Projector	485
Photocopier	500
Domestic Pumps	350-3000

Visit V-Guard DUPS Power Calculator to choose a suitable DUPS, Inverter for your home and work.

Moreover, every electric appliance consumes twice the power when it starts, e.g. a ceiling fan that usually consumes an average of 65W will consume approx. 130W when turned on.

Therefore, it's wiser to turn off high power consumption appliances which you aren't urgently in need of, before turning on your inverter.

Long Lasting

The heart of an inverter, the battery, influences the performance of an inverter. The battery is measured in Ah and varies from 80Ah to 220Ah. Basically, this means that a 150Ah battery would supply a 150 Ampere current for 1 hour or alternatively a 1 Ampere current for 150 hours.

A lot of inverters are equipped with a lead acid battery which is extremely powerful and provides a very good power supply. But like they say, everything good comes at a price! Lead acid batteries have a short life-span and are high-maintenance. On the other hand, those batteries which are sealed and



maintenance-free have a high initial investment cost and a shorter life-span making them not a very wise option either.

Comparatively, tubular batteries are the more popular and long lasting segment of inverter batteries available. Although highly priced, tubular batteries, not only last much longer but are also highly efficient, have a higher scrap value and are low maintenance. A well maintained tubular battery could last you up to 8 years as compared to a flat plate or lead acid battery which performs for a maximum of 5 years.

At V-Guard, we understand that moving the battery around your home can get tiresome at times. Which is exactly why we offer battery trolleys with 5 wheels which can be conveniently moved, are sturdy enough to support the largest battery weight, are durable and easy to install.

Types

While most inverters look alike, they differ largely on the basis of their power, battery type (Tubular & Flat) and the waveform (Sine & Square) that they provide. Here's a look at the variety of inverters we offer.

- **Digital UPS**

Most may tend to believe that an inverter is just the same as a digital UPS, but that isn't true. Although both, an inverter, as well as a UPS, perform the same task of converting DC to AC, the switchover time taken by a Digital UPS (approx. 2-3 milliseconds) is much less than that taken by an inverter (approx. 500 milliseconds). While this time delay may not matter much to us, it does take a toll on devices like computers, printers and a few others.

To explain further, Digital UPS use Digital Signal Processing (DSP) techniques which convert the waves to Pure Sine waves instead of Stepped Sine Wave or Square Wave, a technology which is found in older models. Pure Sine Waves provide a constant, uniform current to devices that enable them to run on full supply. E.g. appliances like motors, refrigerators, fans and televisions will only perform well when supplied with Pure Sine Waves. Any other wave form will cause disturbance in the functioning of the device, thereby damaging it. V-Guard Digital UPS models span a range of 300VA to 10000VA.

- **Solar Inverter**

A solar inverter converts the variable direct current (DC) output of a photovoltaic solar panel into an alternating current (AC) thereby providing the user with power. During the day the battery charges itself using solar energy and once it is charged up to a certain level, the stored energy is utilized to provide electric power. Like any other solar product, solar inverters have an upper hand over other inverters since they are easy to install and use a natural source of energy which they convert to electricity.

Features

Before buying an inverter, make sure that they have the following features.

- **High/low voltage protection**

This feature protects the connected appliances from burning out in case of sudden dangerous voltage fluctuations that go much higher or much lower than the regular limit.

- Overload protection
- Spike Protection

- **Floor mount**



Choose your Inverter as per your power consumption pattern

Here is a chart that can help you choose one of our V-Guard DUPS, Inverters as per your power consumption pattern.

DUPS, Inverter Models	Max Load Capacity (Watts)
Ei Power 300 Plus	240
DU 600 Plus	420
Ei Power 600 Plus	480
DU 675 Pro	472
Ei Power 700 Pro	560
DU 800 Plus	560
Ei Power 800 Plus	640
DU 875 Pro	612.5
DU 875 Pro+	612.5
Ei Power 900 Pro	720
DU 1400 Plus	980
Ei Power 1400 Plus	1120
DU 1500	1050
Ei Power 1500	1200
DU 2500	2000
DU 3500	2800
DU 5500	4400
DU 10000	8000



References

You might have more queries about investing on a suitable DUPS, Inverter for your home or work. Please visit our [FAQs](#) section on V-Guard [website](#) to know more.

For any further queries, please feel free to write to our [Customer Care](#).

There you have it! Our complete inverter buying guide. Equipped with this, we are sure you will be in a position to make a wise decision about purchasing an inverter that best suits your needs.