

Working and Benefits of Inverter for Home

Introduction to Home Inverter:

We all are well aware of inverters because it plays a major role when we do not have electricity. An inverter is basically an electrical power converter that converts direct current (DC) into alternating current (AC). The alternative current can be of any voltage with the help of proper transforms. The inverter performs the opposite activity of a rectifier. The inverter is named so because the mechanics of the direct current and alternative current was made to work in reverse i.e. in an inverted form from DC to AC. Inverters were important then but now they are gaining more importance because the load shedding problem is increasing day by day. Their main use is to provide backup power when there is no flow of electricity. Inverters take power from the battery and supply it when there is electricity cut. In this way it proves to be very helpful and handy.



There are different kinds of inverters that are available today and people always make it a point to buy one in case there are load shedding problems. In this electronic world, everything comes to a standstill when there is no supply of electricity. In that case it is always beneficial to install an inverter generator. The inverter is one such device that is capable of running all devices when there is no supply of power.

Working of Inverter for Home:

An inverter basically converts the direct current to alternative current that can be used to operate all kinds of devices when there is no flow of current or power. All you need to do is just connect your AC and DC power inverter to a battery and plug your AC devices into the inverter. In this way you will have power whenever there is load shedding. The inverter draws power from a battery that is of 12 voltage or various batteries that are parallel wired. The battery needs to be charged from time to time as the power that we receive when there is no electricity supply is because the inverter takes power from the battery. For charging the battery the automobile motor needs to keep running or it can be

charged with the help of solar panels and gas generator. Another alternative is you can charge it with the help of a battery charger by connecting it into an AC outlet.

The power inverter transforms the energy that is stored in a battery to Alternative power for use in industrial and commercial systems where the mains are not available. These kinds of inverters are useful in all kinds of office and homes. Now that you know how an inverter works, let's have a look on some safety measures that needs to be taken to operate it.

- Make sure you place the inverter either vertically or horizontally on a flat surface.
- The machine should not be placed in the engine compartments as the engines get heated easily and also it emits harmful fumes. Thus the machines should always be placed in a cool and dry place.
- Always keep the machine away from water and moisture. Do not operate the machine with wet hands as water conducts electricity which can cause shocks and other major problems.
- The inverter should not be placed near heating vents. Also do not place it under direct sunlight. The ideal air temperature for it should be 50 to 80 degree Celsius.
- Keep the inverter well ventilated while it's in use and keep it clean from time to time.
- Also avoid placing the inverter inside battery compartments and near flammable materials.

Best Inverter Battery for Home:

Before looking for a good inverter battery you need to first check the state of your battery and the amount of electricity you use. If your demands I high then it is obvious that your battery will drain very easily. So it is always better to experiment and then buy. Star off your engine for 10 minutes in order to recharge the battery or keep it on when you use the inverter. In order to keep track on the level of battery take help of the volt meter. Also you could attach several batteries in a parallel way to check its usage.

Deep cycle marine batteries need to be used for large power inverters as because if you use normal batteries it will easily wear also it won't be very effective. For power inverters it is always better to have cycle battery because it helps in starting the vehicle when placed inside it. Other batteries are not that powerful and tend to drain easily. The Deep cycle marine batteries always have the highest reserves. Also they can withstand continuous battery drains and recharging. One must see to it that the marine deep cycle's batteries are not discharged when their charge is below 50%.

If you had to pick one battery that is good then it would definitely be deep cycle marine batteries because they are capable enough to supply power for 30 to 60 minutes even when the engine is off.

They also provide up to 500 watt. Automotive battery supplies are not recommended and should be avoided.

How to Select Best Inverter for Home:

We all know that power flows in two directions i.e. direct and alternative. The direct current always flows in a forward direction whereas the alternative current finds the electrons that keep changing their directions i.e. forward and backward. Whenever we switch on an appliance at our home the current that flows is AC. The alternative current is powerful and is capable enough to transfer different amounts of power. The AC also helps in changing the voltage according to the appliances. Having an inverter at your home is vital because it converts the DC stored into AC. However, before buying an inverter for your home, you must do proper research and buy one that suits your house the best.

You can go about buying a 48 volt invert but then it will cost you more money. When something is costly it surely has added benefits with it. The benefits are if you will have loss of voltage less, also it uses a small wire gauge to run long distance of wire. If you only want few appliances to work at your home when there is no current then you could choose a 24 volt system. If you use very few appliances at home on a daily basis then you can go for sine wave inverter. Though the modified sine wave inverter is cheap it can give you lot of headaches as your appliances won't be able to work properly. So it's up to you to choose one that is cheap or the one that is costly and good. After you have chosen an inverter don't forget to look at its specifications because you must know whether the output of the power is gush or continuous.

Lastly make sure you buy an inverter that you feel is right for your home appliances because if not all appliances at least your inverter should be capable enough to make a fan and a bulb work when there is no electricity.

Benefits of Home Inverter:

As mentioned before these devices are becoming a must have in every household and office. Earlier there were power generators that were huge in size. The same device is modernized and is available today as inverters. The magnets that were used in the traditional generators have been changed, i.e. they are still there but are smaller in size and more powerful than before. Also generators are costlier than inverters. There are many benefits of inverters and a prime one is that it supplies electricity when there is no power. Especially in multinational companies and other corporate sectors works needs to be done on time. In that case they require inverters because their work cannot stop because of any supply of power. Using inverter is very safe and also they are not

that difficult to Handel and operate. If you are planning to buy an inverter for your home or office purpose then you must make sure to buy the best brand.

There are some good top brands of inverters available in the market today which can help you live a tension free and peaceful life. So do not waste much time and buy one today.

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