



Choose the right UPS and you'll get the protection you need at the best price

## Choose the right UPS!

When it comes to specifying or buying an Uninterruptible Power Supply (UPS), there are plenty of options.



Some UPS types give more comprehensive protection than others, but tend to cost more. Some will fit comfortably under a desk, while others are designed for rack or wall mounting. Some are designed to be expandable and some are not.

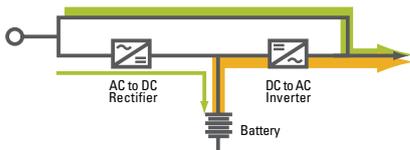
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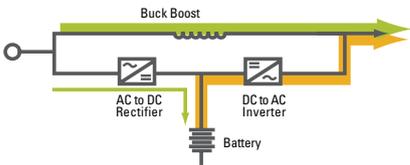
# Which UPS is right for you?

The internal functions of a UPS can be arranged in many different ways – called topologies – but only three are in general use. UPS users don't need to know how the different topologies work, but they do need to know which power problems they protect against.

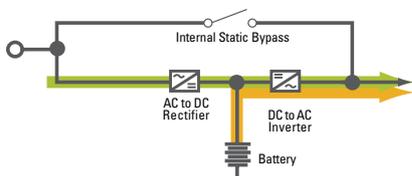
When you've chosen the best topology for your application, the next step is to decide on its form factor – in other words, its shape. Some common form factors are:



- **Passive standby** topology (also called offline) protects against power failure, power sag and power surges. When mains power is normal, the load is fed directly from the mains. If the mains power fails, the battery in the UPS takes over. This topology is inexpensive and provides sufficient protection for most office environments. It isn't suitable where mains power quality is poor, or where the supply is frequently disrupted.



- **Line interactive** topology protects against power failure, power sag, power surge, undervoltage and overvoltage. When mains power is available, the UPS uses this to supply the load, but it monitors and controls the voltage to eliminate fluctuations, without drawing on power from the batteries. If mains power fails, the UPS supplies power from the battery. Line interactive UPSs provide broader protection than passive standby and are ideal for enterprise IT systems and networks.



- **Double conversion** topology (also called online) provides protection against all nine commonly encountered power problems – it ensures power of consistently high quality is supplied to the load, irrespective of disturbances to the mains power. While this means they are more expensive than other types of UPS, they are the first choice for protecting large IT installations and those that handle critical data, such as data centres.

█ Normal operation  
█ Battery power



- **Desktop/tower** – UPSs designed to fit neatly on top of or under a desk. Some can also be mounted in a network cabinet.



- **Rack mount** – UPSs for mounting in equipment racks. Designed to occupy minimum space, many only requiring 2U.



- **Wall mount** – rack mount UPSs with optional hardware allowing them to be wall mounted.



- **Rack mount/tower** – rack mount UPSs with optional hardware allowing them to be used as free-standing tower units.



- **Scalable rack mount** – rack mount UPSs featuring a modular design. More UPS modules can be added to the installation as requirements grow.



- **Large tower** – large floor-standing units designed to provide a central back up for multiple loads.

*Before choosing a UPS, consider your requirements carefully. How much protection do you really need? Is power quality in your area good or bad? Where will you put the UPS? Then choose the topology and the form factor that are right for you and, as Professor Wattson says, you'll get the protection you need at the best possible price.*