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Computer, Internet, and multimedia services at a price you can afford!

Computer Power States

Understanding the various power states of your computer can help you to save time, electricity, and protect your computer from damage due to electrical surges.

G0 Working
This is the state that your computer is in when it is powered on and operating.

- Computer is on and ready to use
- Computer consumes anywhere from 100-600 watts depending on configuration and programs that are running
- Provides no protection against power surges

G1 Sleeping
This power state is divided into several more specific power states. All of these states keep your programs open so that you don't need to reload everything when you want to use your computer again.

S1 Stand By
This is the state that some older computers enter when you choose Stand By or Suspend from the Start Menu.

- Computer can be used in several seconds by just clicking the mouse or pressing a key
- Computer uses around 80-200 watts depending on configuration
- Components stop processing data, but remain on; hard drives may turn off
- Provides minimal protection against power surges – hard drives are theoretically protected

S3 Stand By
This is the state the most newer computers enter when you choose Stand By or Suspend from the Start Menu.

- Computer can be used in several seconds by just clicking the mouse or pressing a key
- Computer uses 20-100 watts depending on configuration
- Most components except mouse, keyboard, RAM (memory), portions of the mainboard, and USB devices are powered down
- Provides minimal protection against power surges – processor and hard drives are theoretically protected

S4 Hibernate
This is the state that newer computers with Windows XP, ME, 2000, or 2003 can enter by selecting Hibernate from the Start Menu. Sometimes you may need to press the Shift key to see the Hibernate option.

- Computer can be used in approx. 30 seconds just by clicking the mouse or pressing the power button

- Computer uses minimal amounts of electricity
- All components except mouse, keyboard, portions of the mainboard, and USB devices are powered down
- Provides some protection against power surges – processor, hard drives, RAM, and other components are theoretically protected

G2 Powered Down

This is the state your computer enters when you choose Shut Down from the Start Menu.

- Computer can be used after it boots up, which may take several minutes
- Computer uses minimal amounts of electricity
- Most components are usually powered down – some computers may leave the mouse, keyboard, USB devices, and portions of the mainboard powered on
- Provides some protection against power surges – processor, hard drives, RAM, and other components are theoretically protected

G3 Mechanical Off

Your computer is in this state if you physically unplug it from the wall or turn off the switch on the back of the computer. Note that some computers do not have a switch, in which case only unplugging the computer puts it in this state. Except on some older computers, the power button on the front of your computer does not put the computer into a G3 state

- Computer can be used after power is restored and it boots up, which may take several minutes
- Computer uses trace amounts of electricity, if any
- All components except sometimes portions of the power supply are powered down – the computer's internal clock continues to run on its battery
- Provides maximum protection against power surges – if computer is physically unplugged, there is no risk of damage due to electrical anomalies

If you are trying to protect your computer from power surges (such as during a thunderstorm), the only guaranteed method of protecting your computer is to physically unplug it from the wall.