MyHomeWorks

Computer

Equipment Description

A home computer consists of memory and integrated circuits, and its central processing unit executes instructions and runs software to perform functions for the user. Desktop computers use a monitor, which can be cathode ray tube (CRT - looks like an old TV screen), or flat screen liquid crystal display (LCD) or light emitting diode (LED) technology. The monitor is the user interface to computer information and graphics. The user typically interacts with the computer through a keyboard and mouse. Laptop or notebook computers are smaller, portable versions of the computer with the laptop, screen, keyboard and mousing mechanism contained within the unit. All computers contain ports to enable electronic connection of other devices to enhance performance, user experience, computer memory and communications.

Loss Scenario

Computers are susceptible to computer viruses and power line disturbances that can cause disruption in software operation and computer hardware failure. Hardware problems can result in computer failure and loss of data. Computers should always have virus protection software installed, operating and updated. Computers should also be electrically connected through a surge protector to minimize impact of power surges. If data is critical or is being used for a home-based business, the computer should be connected through an uninterruptible power supply (UPS) to insure continued operation and/or proper shut down during power line disturbances and interruptions.

Size and Carbon Footprint

Computers use up to 250 watts (W) when they are operating and as much as 45 W when they are put in sleep mode. If your desktop computer runs eight hours a day and sleeps the rest of the time, it can consume up to 990 kilowatt-hours (kWh) annually, which results in approximately 1,500 pounds of carbon dioxide (CO_2) per year. If the computer is idle for any period of time, placing it in sleep mode significantly reduces energy consumption. If the computer is idle for a day or more, turn it off. Do not leave a computer running for long periods of time when not in use. Leaving it on unused for long periods of time wastes energy, increases energy costs, and also puts the computer at risk of intrusion from computer hackers.

Maintenance Tips

- Dust and other grit may accumulate on the inside of the computer as a result of air cooling. If the cooling system is not filtered (most computers are not) then regular computer cleaning may be required to prevent short circuits and overheating.

- Hard drive disk storage will fill up with unwanted files over time. Disk cleanup should be performed as regular maintenance to remove these. If not removed, these unwanted files may become fragmented and slow down the performance of your computer.

Loss Prevention Tips

- Antivirus software is only as good as the frequency with which it is updated. New viruses, worms, and Trojan horses are developed daily, and variations of them can slip by antivirus software that is not kept up to date.

- Data and pictures stored should be copied to an external drive or cloud storage location and archived securely so that, in the event of a hard drive failure, this information can be reconstructed. When major maintenance or an operating system upgrade is performed, a backup is recommended as the first step in case the update fails and reversion is required.