



Buying a Computer for the Farm January 2004

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Computers are getting more prevalent on the farm. According to the latest statistics from the USDA, about 30% of the farms in Wisconsin are using a computer for farm business and 51% are accessing the Internet. Producers are using computers for accounting or financial management, taxes, dairy herd management, payroll, Internet access, and crop or nutrient management. Some of the benefits of using a computer on the farm are as follows: easier and quicker to keep records; records are more useable and easier to analyze; access to the Internet, and a better handle on the financial status of the farm.

A frequently asked question by producers is what kind of computer to get for their farm operation. Fortunately, there is a much better selection of quality computers on the market today to meet your farm needs than there was just a few years ago. Prices for computer systems went down in 2003, and the power of the computer systems increased.

First, let define a few terms. Hardware is the components of a computer system that you can put your hands on. Software is the information that directs a computer system to perform some function, such as a program or applications package.

Let's look at how size or capacity is measured. One byte (b) of information is equivalent to one letter in the alphabet or a single number. One kilobyte (kb) equals 1000 bytes. One megabyte (MB) equals one million bytes. One gigabyte (GB) equals one thousand megabytes or one billion bytes.

Almost all the computers on the market lately will efficiently run software purchased for farm and home use. There are differences between computer companies regarding repair history, technical support, warranties, reliability, and service. Make sure to check a reliable source of information on these factors before purchasing a computer.

Macintosh (Mac) and Windows are the two main operating systems used by home computers. Mac's tend to be easier to use but cost more and have less choice of software and add-ons for both home and agricultural uses. Consider purchasing a Windows computer for farm or home use.

The microprocessor or central processing unit (CPU) determines how quickly a computer runs applications and performs many tasks. It is the "brain" of the computer. Its speed is measured in millions (MHz) or billions (GHz) of operations per second. The main microprocessors on the market are the Pentium 4 (Intel Corporation) and Athlon XP and 64 (AMD). They are comparable in performance in most computer systems.

The hard drive is the part of the computer where programs and data are stored. The capacity of a hard disk is fixed and cannot be changed.

The video display system is a combination of the video graphics card or chip and the color monitor. The video graphics card or chip generates all the images on the computer monitor. They have variable amounts of memory. Color monitors are either the standard CRT (cathode ray tube, like a television) or

the newer flat panel or LCD (liquid crystal display) type. The flat panel types have the advantage of smaller overall size and a greater viewable image. The CRTs are cheaper than the flat panel types, but the price difference between the two types is decreasing.

Most computers include CD (compact disk) and/or DVD (digital versatile disk) drives. Many computers on the market today have CD drives that are rewriteable (RW). Some computers may also have rewriteable DVD drives or combination drives.

RAM (random-access memory) is the read-write memory of the computer. The more RAM a computer has, the more applications one can run at once and the better the system will perform.

A modem is a device which computers use to communicate over the telephone. Computers have an internal, 56 kbps FAX/modem as standard equipment which can be used to link up with the Internet.

The basic components change every year for the better. For 2004, consider getting the following minimum components in a computer. They are as follows:

- 2.66 GHz Intel Pentium 4 or AMD Athlon XP 2500+ microprocessor
- 60.0 to 80.0 GB Hard Drive
- 256 to 512 MB RAM
- 48X24X48 CD-RW and/or a 16X DVD-ROM
- 56 kbps modem
- 15- or 17-inch flat panel or 17-inch CRT color monitor

There are a few choices in where to buy a computer. One can go to a local store that sells computers, or one can order a computer direct from the manufacturer or on-line. They all have potential benefits regarding choice and cost. Consider checking at a local store first to get an idea on computer choices and cost. Then, compare with the other two ways.

Do not limit the capabilities of your computer. Think about potential future uses for your computer and purchase one that will meet these needs. The difference in price between a low-end computer and a high-end computer is now only a few hundred dollars.

