

DMS-10101, Computer Equipment

Overview

Effective dates: September 2005 - August 2006.

This Specification describes the procedures for providing desktop microcomputers, laptop microcomputers, printers, and internet service for use on Department projects.

Equipment

Furnish system components of the latest design and meet or exceed the minimum requirements of this Specification. Include all hardware, software, documentation, and any other materials necessary to fully utilize components, even if not specifically noted in this Specification.

Furnish peripheral components of the latest design meeting or exceeding the minimum requirements listed in this Specification. Peripherals include all hardware, software, documentation, and any other materials necessary to fully utilize the peripheral component, even if not specifically noted in this Specification.

Resolve device conflicts to the satisfaction of the Engineer before acceptance for use.

Provide required equipment with the following features:

Desktop Microcomputer

Minimum requirements are:

- ◆ tower type case, a reset switch and a disk activity indicator are preferred but not required
- ◆ Intel® Pentium® 4 Processor or better (3.0 GHz minimum)
- ◆ 512 MB minimum of DDR RAM
- ◆ 40 GB hard drive and controller (ATA-100 or better)
- ◆ CD-RW drive, with minimum speeds of 48×32×48 (write × rewrite × read), installed in the case
- ◆ 3.5 in. floppy disk drive
- ◆ keyboard with the following features:
 - 104 standard keys (includes Microsoft® Windows defined keys) and
 - either PS-2 or USB interface (PS-2 preferred).
- ◆ 17 in. color SVGA monitor (0.26 mm dot pitch)
- ◆ display adapter (video card) including the following features:

- 32 MB of on board video RAM minimum.
- ◆ built-in I/O ports to include the following:
 - two USB interfaces
 - 10/100 Ethernet Network Interface (if connection to internet service provider [ISP] via broadband network)
 - one RS-232C serial port, capable of 19,500 bits per second (bps)
 - one parallel printer port and
 - 56 kbps fax/data modem compatible with Hayes™ AT command set.

Laptop Microcomputer

Minimum requirements are:

- ◆ color display including the following features:
 - display area measuring at least 14 in. diagonally
 - screen intensity control and
 - active-matrix (thin film transistor [TFT]) technology.
- ◆ Mobile Intel® Pentium® 4 Processor 532 with HT technology 3.06 GHz
- ◆ 512 MB minimum of DDR or DDR2 RAM
- ◆ internal hard drive, 30 GB minimum, and controller (ATA-100 or better)
- ◆ integrated CD-RW drive, with minimum speeds of 16×10×24 (write × rewrite × read), installed in the case
- ◆ one PC card slot
- ◆ integrated keyboard with the following features:
 - minimum 81 standard keys
 - integrated touchpad pointing device and
 - sound capability with two speakers integrated into the case.
- ◆ rear mounted I/O ports as follows:
 - VGA video port
 - two USB ports
 - 10/100 Ethernet Network Interface (if connection to ISP via broadband network)
 - one integrated RS-232C serial port
 - one parallel printer port and
 - 56 kbps fax/data modem compatible with Hayes™ AT command set.
- ◆ operable in ambient temperatures from 50°F to 95°F

- ◆ capable of operating from the following power sources:
 - 120V, 60Hz AC (include an AC line cord) and
 - an internal battery that: is capable of operating the computer for a minimum of 3 hr. (under normal use), recharged while the computer is operating from the AC power source, and is removable (include an external battery charger).

Secure Digital (SD) Card and Reader/Writer

The requirements are:

- ◆ SD card with the following features:
 - minimum 1 GB memory size
 - minimum of 20 MB/sec sequential write and read speed and
 - tolerates temperatures between -13 to +185°F.
- ◆ USB 2.0 Media Reader/Writer with the following features:
 - support – SD card
 - interface = USB 2.0 Hi-Speed
 - include accessories Hi-Speed USB cable (if required)
 - minimum transfer speeds of 480Mbps and
 - compliant with standards for ‘Plug and Play.’

Integrated Printer/Scanner/Fax Unit/Copier

The requirements are:

- ◆ printer with the following features:
 - black ink and color printing capability
 - 3 printing speeds for black ink printing: draft mode (17 pages per minute [ppm]), normal mode (7 ppm), best quality (2 ppm)
 - 3 printing speeds for color printing: draft mode (12 ppm), normal mode (4 ppm), best quality (0.5 ppm)
 - monthly print volume: 3,000 pages (paper size: 8.5" by 11")
 - print quality: 1200 × 1200 dpi (black ink and color)
 - print language: HP PCL Level 3 Enhanced and
 - compatible with Microsoft’s XP operating system (provide associated printer software drivers, as necessary).
- ◆ scanner with the following features:
 - flatbed scanner capable of scanning 8.5" by 14" paper and
 - 600 × 600 dpi scanned resolution.

- ◆ fax with the following features:
 - 300 × 300 dpi fax resolution
 - 33.6 kbps fax transmission speed
 - 50 pages of fax memory and
 - dialing memory for 40 numbers.
- ◆ copier with the following features:
 - full page copy for standard 8" by 11" paper
 - up to 17 copies per minute (cpm) of black ink copies
 - up to 12 cpm of color copies and
 - 1200 × 1200 dpi copy resolution for black and color copies.

Internet Service Provider (ISP)

Provide internet service via an ISP capable of accessing the Department's Citrix® Metaframe Server at Austin Headquarters using Department-furnished Citrix® client software.

Furnish broadband internet connection to the Department's Citrix® Metaframe Server via the chosen ISP. Broadband connection may be wireless, digital subscriber line (DSL) or cable modem. Provide connections in the quantity needed to provide simultaneous connection of the Contractor and the Inspector. Provide dial-up access only when broadband connection is *not* available. Furnish dial-up service that consistently provides at least 32 kbps connection speed.

Provide a dedicated dial-up modem line, DSL, or cable connection for the desktop microcomputer or laptop microcomputer furnished. If a DSL or cable connection is chosen, provide PC to DSL/cable modem connectivity. Because of problems connecting to the Citrix® Metaframe server, the Department will not permit integrated services digital network (ISDN) service. Provide connection to an ISP with a local number able to access the Citrix® Metaframe server at Austin Headquarters. Validate that a connection can be established by the chosen ISP. ISPs that use TCP/IP protocol should be capable of accessing the Citrix® server.

Work Methods

Contractor-furnished Software

Include the following software:

- ◆ Microsoft® Windows XP Professional
- ◆ Microsoft® Office XP Professional
- ◆ WinFax PRO current version

- ◆ WinZip® current version
- ◆ Adobe® Reader® current version
- ◆ Diskeeper current version
- ◆ Netscape® Navigator current version
- ◆ Microsoft® Internet Explorer current version and
- ◆ McAfee® Virus Scan® current version.

Department-furnished Software

The Department may install State-owned applications on the microcomputer. If so, the Contractor will be required to sign an agreement authorizing the use of State-owned software on Contractor-owned equipment. The Department will be responsible for the installation and maintenance of the State-owned applications. The Department will remove all State-owned applications before removing the microcomputer from the project.

Hardware

Deliver the specified hardware with specified software installed, configured, tested, and fully operational. Furnish hardware and software that is Year 2000 compliant.

Maintain the equipment for the duration of the project. In the case of needed repairs for the hardware, repair or replace the hardware within a reasonable time frame.

Retain all equipment, except for State-owned applications, at the conclusion of the Contract.

Archived Versions

The following archived versions of "DMS-10101, Computer Equipment," are available:

- ◆ 10101-0804 for the Specification effective August 2004 through August 2005.