

**SPECIFICATIONS  
FOR  
HP Z230 MINI-TOWER WORKSTATION  
for use by the  
TENNESSEE DEPARTMENT OF SAFETY AND HOMELAND  
SECURITY (“TDOSHS”)**

**A. GENERAL MODEL CONFIGURATION**

THE CONTRACTOR IS TO PROVIDE A MODEL HP Z230 WITH THE FOLLOWING FEATURE:

- INTEL CORE I7-4790 3.6 GHz (Max. 4GHZ)
- QUAD CORE
- 8GB SDRAM (DDR3/SDRAM) MEMORY 1600 MHz
- WD BLACK 1TB SATA 7.2K 6GB/s HARD DRIVE
- 16x SuperMulti DVD Burner (DVD±RW (±R DL) / DVD-RAM – SATA)
- AMD FIREPRO W5100 4GB GRAPHICS CARD,
- GIGABIT ETHERNET CONNECTION RJ-45,
- GENUINE MICROSOFT WINDOWS 7 PROFESSIONAL 64-BIT EDITION / WINDOWS 8.1 PRO 64-BIT EDITION DOWNGRADE
- 4 X USB 3.0 ( 2 FRONT, 2 REAR ) 6 X USB 2.0 ( 2 FRONT, 4 REAR ) 1 X HEADPHONES/MICROPHONE ( 1 IN FRONT ) 1 X MICROPHONE ( 1 IN FRONT ) 1 X SERIAL 3 X DISPLAYPORT 1 X PS/2 KEYBOARD 1 X PS/2 MOUSE 1 X LAN (GIGABIT ETHERNET) 1 X AUDIO LINE-IN 1 X AUDIO LINE-OUT

**B. INTEROPERABILITY WITH THE STATE'S NETWORK**

The State's computing network provides connectivity throughout the State among approximately 40,000 devices, including servers, Desktops and notebook systems, terminals, thin clients, printers and other equipment. This communications network supports TCP/IP and uses a Wide Area Network. Centralized servers providing shared IT infrastructure applications, database, and e-mail services to State Agencies and local government programs include Intel and Sun SPARC-based platforms and farms running Windows, Linux, VMware, Solaris, Citrix Metaframe, and other operating systems; mainframe processing is done by an IBM Z9 series computer running z/OS and zVM/zLinux; consolidated SAN data storage and centralized net back-up utilize a Hitachi 9900 series, an IBM Shark ESS800 disk storage system, and IBM, STK and SUN tape drives and cartridges.

Centralized Office for Information Resources (OIR) staff and Agency staff provide technical, operational, and telecommunications support to the State's infrastructure. In addition, OIR's Service Desk (OSD) organization provides linkage among OIR, State Agency users, and the warranty and technical support organizations of server, Desktops, and portable systems contractors, printer contractors, and contractors providing other technologies. To minimize inappropriate service calls to Contractors,

the OSD dispatches trouble calls to the appropriate Vendor organization. The OSD also monitors Vendor compliance with warranty service timeliness and quality provisions.

1. All Desktops and operating system software proposed or provided under this ITB must interoperate successfully within the State's network.
2. All Desktops and operating system software proposed or provided under this ITB must, as appropriate, fully support PCI Express adapters and Ethernet adapters, and the State's standards for connecting Computers to the State's networks and/or storage devices.
3. All Desktops and operating system software proposed or provided under this ITB must interoperate with the State of Tennessee's network by fully supporting TCP/IP (including DHCP, with dynamic DNS), and SNMP, unless otherwise noted.
4. All Desktops and operating system software proposed or provided under this ITB/Contract must provide full support of networked printers using LPR/LPD technology for IP print to a networked printer within the State's networking environment, as well as full support of local printers.

**C. HARDWARE COMPATIBILITY WITH STATE STANDARD COMMUNICATIONS SOFTWARE**

1. All Desktops and operating system software proposed or provided under this ITB must be fully compatible (where applicable) with the current version of standard commercial communications software packages utilized by the State, regardless of operating environment (i.e., Windows 7.0 Professional Edition and Windows 8.1 Professional Edition).
2. All Desktops and operating system software proposed or provided under this ITB must remain compatible with the State's Standard Communications Software. Any incompatibilities with these software packages discovered must be rectified at no charge by the Contractor within 30 days of notification.
3. The Contractor must be able to provide, upon request of the State, documentation of licensing for any software purchased or provided under this contract.

**D. OTHER TECHNICAL REQUIREMENTS**

1. All Desktops and equipment proposed or provided under this ITB must (as appropriate) be FCC Class B and UL/CSA certified.
2. All Desktops and equipment proposed or provided under this ITB must be accompanied by all industry standard software, cabling, terminating resistors, and mounting brackets/hardware for such products. This software, cabling, terminating resistors, and mounting brackets/hardware must permit the installation and successful operation of the hardware as an originally installed or upgrade device, as ordered.

3. All Desktops and operating system software proposed or provided under this ITB must be provided with complete industry standard owner's/operator's manuals, installation instructions, and technical documentation for such products, or must be provided with current instructions for downloading these items from the World Wide Web without charge.
4. All Desktops and equipment proposed or provided under this ITB must be provided with "Restore CDs" or "Hidden Partition," that enables the user to reinstall the operating system ordered with the system and restore the system to a factory configuration/settings condition.
5. All Desktops proposed or provided under this ITB must be provided with an internal power supply that will power the system when configured as specified.

**E. GENERAL TECHNICAL SPECIFICATIONS**

1. All Desktops and associated components proposed or provided under this ITB:
  - a. Must be provided with all items (except those specified as external or optional) contained and enclosed within the system unit.
  - b. Bidders must identify any self-registration claims made based on standards from: Energy Star and EPEAT (Bronze, Silver, or Gold registration level identified). All Desktops systems provided under resulting from this ITB are required to have achieved a minimum EPEAT Bronze Registration and Energy Star certification. Bidders claiming products have been independently certified as meeting reputable environmental standards must provide proof of such certification.
2. All Desktops and External devices must be supplied with a power cable.
3. All Desktops and items installed in/internal to system, and all other hardware (including peripherals) ordered from/delivered under this ITB, except as otherwise noted in this ITB, must be provided standard with a three-year (3-year) depot parts and labor warranty.
4. The Contractor or the Manufacturer must also make available to the State, at no additional cost, during the warranty period current firmware for all equipment provided under ITB and updates to software provided under this ITB.

**F. ON-SITE AND DEPOT PARTS AND LABOR EQUIPMENT WARRANTY**

1. The responsibility to register with the manufacturer for all warranties to which the ordering Agency is entitled (whether provided "standard" with the equipment or ordered at additional cost under the ITB by the Agency) all equipment ordered under ITB lies solely with the Contractor; the responsibility to fulfill all warranty obligations under ITB lies solely with the Contractor.

2. Centralized State staff will screen warranty calls and provide the Contractor with basic information about the contact Agency and the equipment malfunction. The Contractor must diagnose the equipment malfunction and must initiate warranty service when the malfunction is not caused by the State's environment or operator error.
3. All equipment delivered under this Contract must be warranted for parts and labor on-site warranty, as specified in this ITB, except as otherwise noted in this ITB, from the date of invoice for the greater of the manufacturer's warranty period. The Contractor must honor all warranties.
4. All equipment repaired or replaced under warranty must be warranted until the later of: (A) the end of the original warranty period, or (B) ninety (90) days after equipment repair or replacement; except that all equipment failing more than twice during the first sixty (60) days after delivery or more than three (3) times during the first year of the warranty period must be replaced by the Contractor, at no additional cost to the State, with equivalent new equipment and must be provided with a new equipment warranty.
5. Only equipment commercially available to the general public as of the bid opening date may be bid in response to this Invitation to Bid Event. Only new equipment defined as equipment that has not been used for any purpose other than performance testing prior to delivery or installation or for certification, either during initial bid evaluation or subsequently is acceptable for delivery to fulfill purchase orders issued under this contract. New equipment may not be refurbished or reconditioned; however, warranty repairs may be affected using refurbished or reconditioned parts, if these parts are provided "As New" or "Like New" and are warranted by the manufacturer as required in this Invitation to Bid Event.
6. Parts and Labor Warranty Service
  - a. On-site and Depot parts and labor warranty service, as specified in this ITB, must be provided by the Contractor, for all systems, items installed in/internal to the system, and all other hardware (including peripherals) ordered from/delivered under this contract, except as otherwise noted in this ITB, at no cost to the State during the warranty period specified. There shall be no additional charges for travel or shipping associated with warranty service. The agent of the contractor or manufacturer when providing on-site warranty service must arrive at the site where the failed equipment is located in time to complete the warranty repairs, or to provide replacement equipment, within the timeframes specified in the ITB for return of the equipment to service or replacement of the equipment. On-site service must be provided only by a badged service employee of the Desktop system manufacturer or by a person holding current certification, issued by the manufacturer of the Desktops and, in the repair of the failed Desktops. On-site parts and labor replacement warranty (including installation) may be effected, for only items which are not Desktops and or which are not installed in and/or internal to Desktops and and which weigh less than 20 pounds, by shipping a replacement

item to the customer site in a reusable box, with prepaid return postage, so that the item arrives within the warranty completion times specified in the ITB.

- b. The State will initiate warranty service by contacting the Contractor. The on-site and depot warranty service completion timeframes specified will be calculated from the time the State contacts the Contractor. Generally, the State will make equipment covered under warranty available to the Contractor for warranty service during business hours; these hours are 7:00 A.M. until 4:30 P.M. CST/CDT. The State may elect to extend these hours past 4:30 P.M. on a case by-case basis. If the State elects not to extend past 4:30 P.M. the time the equipment is made available to the Contractor to complete warranty service, the Contractor must resume work at 7:00 A.M. the next business day.
- c. On-Site Parts and Labor Warranty Service: Metropolitan Area Equipment
  - i. On-site warranty service must be provided in Metropolitan areas for all equipment for which this type of service is specified in the ITB. For calls received by noon CST/CDT, on-site warranty service in these Metropolitan areas must be **completed** by 4:30 P.M. CST/CDT the second business day. For calls received by 2:00 P.M. CST/CDT, on-site warranty service must be **completed** by noon CST/CDT third business day following.
  - ii. Metropolitan Areas, Metropolitan Counties are defined as the cities of Memphis, Jackson, Nashville, Chattanooga, Clarksville, Knoxville, Tri-Cities area (Bristol, Johnson City, and Kingsport and the counties containing them).
- d. On-Site Parts and Labor Warranty Service: Non-Metropolitan Area Equipment
  - i. On-site warranty service must be provided in Non-Metropolitan areas for all equipment for which this type of service is specified in the ITB. For calls received by noon CST/CDT, on-site warranty service in these Non-Metropolitan areas must be **completed** by noon CST/CDT the third-business day following. For calls received by 2:00 P.M. CST/CDT, on-site warranty service must be **completed** by 4:30 P.M. CST/CDT the fourth business day following.
  - ii. Non-Metropolitan Areas are defined as all locations in Tennessee except those defined in Section 6.c.ii.