

**Item Description: Computational and Storage Servers, Computer Workstations, Firewall Server, Switch, Data Cabinet, etc**

**Unit: Lot**

**Qty: 1**

**ABC: Php 6,500,000.00**

**Payment Terms: Accepts Purchase Order**

**Delivery Terms: 60-90 days**

### **I. Computational Server (1 unit, 4 nodes in a 2u server)**

#### **Specifications for each node:**

- 1) Processor speed: At least 2 X 2.1 GHz 12-Core Intel Xeon
- 2) RAM: At least 12 X 32 GB DDR4
- 3) LAN: 2x10G optical fiber SFP+
- 4) At least LSI 3008 (HBA/IT mode) or compatible
- 5) Storage space: At least 2 x 480 GB SATA SSD
- 6) Operating system: Ubuntu Linux for server

#### **Inclusions:**

- 7) Backup UPS 650 VA/350 W (or appropriate voltage/wattage) with universal socket and surge protector
- 8) 2 units 10G SFP+ multimode transceivers and 2 LC-LC multimode fiber cables (at least 10 meters) that must be compatible with the computational server
- 9) 3-year warranty on all parts and services, including annual preventive maintenance for the duration of the warranty period
- 10) Shipping to Philippine Genome Center Building (College of Science Complex, UP Diliman, Quezon City), Installation, Cabling (I/O ports and switch), and Configuration by Field Service Engineer and all materials needed for installation

### **II. Storage Server (1 unit)**

#### **Specifications:**

- 1) Processor speed: At least 2 X 2.1 GHz 12-Core Intel Xeon
- 2) RAM: At least 8 X 32 GB DDR4
- 3) LAN: 2x10G optical fiber SFP+
- 4) At least LSI 3008 (HBA/IT mode) or compatible
- 5) Operating system: Ubuntu Linux for server
- 6) Storage space:
  - a. At least 4 x 480 GB SATA SSD
  - b. At least 12 x 6 TB SAS HDD

#### **Inclusions:**

- 7) Backup UPS 650 VA/350 W (or appropriate voltage/wattage) with universal socket and surge protector
- 8) 2 units 10G SFP+ multimode transceivers and 2 LC-LC multimode fiber cables (at least 10 meters) that must be compatible with the storage server
- 9) 3-year warranty on all parts and services, including annual preventive maintenance for the duration of the warranty period
- 10) Shipping to Philippine Genome Center Building (College of Science Complex, UP Diliman, Quezon City), Installation, Cabling (I/O ports and switch), and Configuration by Field Service Engineer and all materials needed for installation

### **III. Computer Workstations (8 units)**

**Specifications for each unit:**

- 1) Processor speed: Intel i7 Core
- 2) RAM: At least 8 GB DDR
- 3) Storage space: At least 1 TB SATA HDD
- 4) Operating system:
  - a. Windows 10 operating system with license
  - b. Ubuntu Linux (optional as dual boot)
- 5) USB 3.0 ports
- 6) Gigabit LAN
- 7) WLAN
- 8) Bluetooth
- 9) With HDMI and VGA ports and cables
- 10) Graphics card - CUDA cores: at least 768, Graphics clock: at least 1290 MHz, Processor clock: at least 1392 MHz, Memory clock: at least 7 Gbps, Standard memory config: at least 4 GB, Memory interface: GDDR5, Memory interface width: at least 128-bit, Memory bandwidth: at least 112 GB/sec, Supported technologies: CUDA, 3D Vision, PhysX, NVIDIA G-SYNC™, Ansel
- 11) Ultrawide monitor (23-27 inches)
- 12) Wired keyboard and mouse
- 13) With endpoint protection (3-year license)

**Inclusions:**

- 14) 8 units Backup UPS 650 VA/350 W (or appropriate voltage/wattage) with universal socket and surge protector
- 15) 2 units of Microsoft Office, with multi-user (for 5 individuals) license
- 16) At least 8 units Cable: Factory-terminated Cat6 patch cords that support 1G (at least 25 meters)
- 17) 3 units Wireless Access Points
- 18) 12 units Workstation Desks (W x D x H: 700 – 750 mm x 350 – 400 mm x 650 – 700 mm) with Office Chairs (with arm rests and back rest)
- 19) 10 units Steel Rolling Drawers (W x D x H: 450 – 500 mm x 450 – 500 mm x 450 – 500 mm)
- 20) 1 unit Laser Color Printer (at least 20 ppm, at least 600 x 600 dpi, printer/copier/scanner, 3-year warranty on all parts and services including annual preventive maintenance for the duration of the warranty period)
- 21) Portable whiteboard with stand
- 22) Structured Cabling (non-invasive)
  - a. Mini-Comm Module, Cat 6, UTP, 8 POS 8 wire, White (at least 21 pcs)
  - b. Mini-Comm Module, Cat 6, UTP, 8 POS 8 wire, Black (at least 24 pcs)
  - c. Patch Panel 24-Port, Modular Snap In, Black (Unloaded) (at least 1 pc)
  - d. Copper Patch Cord, Cat 6, Blue UTP Cable, 1 meter (at least 24 pcs)
  - e. Copper Patch Cord, Cat 6, Blue UTP Cable, 2 meters (at least 21 pcs)
  - f. Cable Organizer (Steel) for Data Rack 1U2H (at least 1 pc)
  - g. UTP Cable, Cat 6, 4-Pair, 24 AWG w/ 30% Contingency (at least 2 rolls)
  - h. Roughing-ins and cable accessories consumable (1 lot)
  - i. Labor Installation (1 lot)
  - j. Cables will be placed in a floor wire duct
  - k. Data Com Box (100x250x250mm) (1 pc)
- 23) 3-year warranty on all parts and services for each unit, including annual preventive maintenance for the duration of the warranty period
- 24) Shipping of each unit to Philippine Genome Center-Mindanao Satellite Facility (College of Science and Mathematics, UP Mindanao, Davao City), Installation by Field Service Engineer and all materials needed for installation

#### **IV. Computer Workstations (2 units)**

##### **Specifications for each unit:**

- 1) Processor speed: Intel i7 Core
- 2) RAM: At least 64 GB DDR
- 3) Storage space: At least 1 TB SATA HDD
- 4) Operating system:
  - a. Windows 10 operating system with license
  - b. Ubuntu Linux (optional as dual boot)
- 5) USB 3.0 ports
- 6) Gigabit LAN
- 7) WLAN
- 8) Bluetooth
- 9) With HDMI and VGA ports and cables
- 10) Graphics card - CUDA cores: at least 3584, Boost clock: at least 1582 MHz, Memory speed: at least 11 Gbps, Standard memory config: at least 11 GB GDDR5X, Memory interface width: at least 352-bit, Memory bandwidth: at least 484 GB/sec, Supported technologies: CUDA, 3D Vision, PhysX, NVIDIA G-SYNC™, Ansel
- 11) Ultrawide monitor (23-27 inches)
- 12) Wired keyboard and mouse
- 13) With endpoint protection (3-year license)

##### **Inclusions:**

- 14) 2 units Backup UPS 650 VA/350 W (or appropriate voltage/wattage) with universal socket and surge protector
- 15) At least 2 units Cable: Factory-terminated Cat6 patch cords that support 1G (at least 25 meters)
- 16) 3-year warranty on all parts and services for each unit, including annual preventive maintenance for the duration of the warranty period
- 17) Shipping of each unit to Philippine Genome Center-Mindanao Satellite Facility (College of Science and Mathematics, UP Mindanao, Davao City), Installation by Field Service Engineer and all materials needed for installation

#### **V. Firewall System (1 unit)**

##### **Specifications:**

- 1) With Network Protection
- 2) With Web Protection
- 3) VPN-compatible
- 4) At least 250 Mbps for firewall throughput
- 5) Networking: At least dual 1GbE RJ45 LAN

##### **Inclusions:**

- 6) Backup UPS 650 VA/350 W (or appropriate voltage/wattage) with universal socket and surge protector
- 7) Cables: At least 4 units of Factory-terminated Cat6 patch cords that support 1G (at least 3 meters)

- 8) 3-year license and warranty on all parts and services, including annual preventive maintenance for the duration of the warranty period
- 9) Shipping to Philippine Genome Center-Mindanao Satellite Facility (College of Science and Mathematics, UP Mindanao, Davao City), Installation, Configuration and Integration with the switch, workstations, and internet service provider by Field Service Engineer and all materials needed for installation
- 10) Training by Field applications specialist good for 5-10 pax. Training should include equipment operation, maintenance, documentation, and troubleshooting

## **VI. Switch (2 units)**

### **Specifications for each unit:**

- 1) Total System Ports: At least 28 Gigabit Ethernet
  - a. At least 24 x PoE+ Gigabit Ethernet Ports
  - b. At least 2 x GbE Combo Ports + 2 x SFP Slots
- 2) At least 382W Dedicated PoE Power
- 3) At least 41.66 Mbps Transfer Rate
- 4) At least 56 Gb/s Switching Capacity
- 5) At least 12 Mb Packet Buffer
- 6) IPv6 Support
- 7) Advanced Layer 3 Traffic Management
- 8) Flash: At least 32 MB
- 9) CPU Memory: At least 256 MB

### **Inclusions:**

- 10) 2 units Backup UPS 650 VA/350 W (or appropriate voltage/wattage) with universal socket and surge protector
- 11) Cable manager
- 12) 1-year warranty on all parts and services, including annual preventive maintenance for the duration of the warranty period
- 13) Shipping to Philippine Genome Center-Mindanao Satellite Facility (College of Science and Mathematics, UP Mindanao, Davao City), Installation, Configuration and Integration with the firewall server, workstations, and internet service provider by Field Service Engineer and all materials needed for installation
- 14) Training by Field applications specialist good for 5-10 pax. Training should include equipment operation, maintenance, documentation, and troubleshooting

## **VII. 24-inch Floor Standing Data Cabinet (1 unit)**

### **Specifications:**

- 1) 12 U
- 2) Ventilated top
- 3) Cable access (Top and bottom)
- 4) Side panels are lockable and removable
- 5) Width: at least 600mm
- 6) Internal working depth: at least 700mm
- 7) With installed horizontal Power Distribution Unit (PDU)
- 8) With wheels/rollers

### **Inclusions:**

- 9) Shipping to Philippine Genome Center-Mindanao Satellite Facility (College of Science and Mathematics, UP Mindanao, Davao City), and Installation by Field Service Engineer of switches, firewall server, and cables

- 10) 1-year warranty on all parts and services, including annual preventive maintenance for the duration of the warranty period

### **VIII. Tower-Type Airconditioner (1 unit)**

#### **Specifications:**

- 1) Inverter type
- 2) 2.0 HP

#### **Inclusions:**

- 3) 3-year warranty on all parts and services, including annual preventive maintenance for the duration of the warranty period
- 4) Shipping of each unit to Philippine Genome Center-Mindanao Satellite Facility (College of Science and Mathematics, UP Mindanao, Davao City), Installation by Field Service Engineer and all materials needed for installation
- 5) Backup UPS 650 VA/350 W (or appropriate voltage/wattage) with universal socket and surge protector

### **IX. Portable LCD Projector (2 units)**

#### **Specifications for each unit:**

- 1) Resolution: 1920 x 1000
- 2) With cables necessary for operation (e.g. power cables)
- 3) With HDMI port and cable
- 4) With USB port and cable
- 5) With VGA port and cable
- 6) At least 5000 lumens

#### **Inclusions:**

- 7) 2 units Projector Screen (tripod-type)
- 8) 3 units Laser Pointers/Presenters
- 9) Shipping of each unit to Philippine Genome Center-Mindanao Satellite Facility (College of Science and Mathematics, UP Mindanao, Davao City) with all materials and services needed for operation
- 10) 3-year warranty on all parts and services, including annual preventive maintenance for the duration of the warranty period

### **X. Document Camera (2 units)**

#### **Specifications for each unit:**

- 1) At least 2MP
- 2) At least 30 fps
- 3) At least 1080p HD resolution
- 4) At least 10x zoom
- 5) With VGA port and cable
- 6) With USB port and cable
- 7) With HDMI port and cable
- 8) With cables necessary for operation (e.g. power cables)
- 9) With microphone

#### **Inclusions:**

- 10) Shipping of each unit to Philippine Genome Center-Mindanao Satellite Facility (College of Science and Mathematics, UP Mindanao, Davao City) with all materials and services needed for operation

### **XI. Portable all-in-one PC (1 unit, similar to touch-screen TV)**

#### **Specifications:**

- 1) 50-60 inches
- 2) At least Intel i5 Core processor
- 3) At least 8 GB DDR RAM
- 4) At least 1 TB HDD
- 5) Installed with suitable operating system with license
- 6) With compatible graphics card
- 7) With USB 3.0 port(s)
- 8) With stylus
- 9) Suitable LAN
- 10) Bluetooth
- 11) With HDMI and VGA ports and cables
- 12) With wall mount, stand, and installation
- 13) With cables necessary for operation (e.g. power cables)
- 14) With endpoint protection with suitable license

**Inclusions:**

- 15) Shipping of each unit to Philippine Genome Center-Mindanao Satellite Facility (College of Science and Mathematics, UP Mindanao, Davao City), Installation by Field Service Engineer and all materials needed for installation
- 16) 3-year warranty on all parts and services, including annual preventive maintenance for the duration of the warranty period
- 17) Backup UPS 650 VA/350 W (or appropriate voltage/wattage) with universal socket and surge protector

**XII. Camera (1 unit)**

**Specifications:**

- 1) Mirrorless
- 2) At least 24.3 MP
- 3) 0.75x with 50mm lens
- 4) ISO 200 to 12800(1/3 step), Extended: ISO 100 / 125 / 160 /25600 / 51200
- 5) With USB3.0 (High-Speed) / micro USB terminal
- 6) With HDMI micro connector (Type D)
- 7) 3.5mm, stereo mini connector (Microphone)
- 8) 2.5mm, Remote Release Connector
- 9) Wi-Fi (IEEE 802.11b / g / n)
- 10) Bluetooth Ver. 4.0 (Bluetooth low energy)
- 11) Recording time: 4K: approx. 35 min., FULL HD: approx. 45 min.
- 12) Frame rate: 59.94p / 50p / 29.97p / 25p / 24p / 23.98p
- 13) With cables necessary for operation (e.g. power and data cables)

**Inclusions:**

- 1) Tripod
- 2) 2 additional SD cards
- 3) 2 additional extra batteries
- 4) Shipping of each unit to Philippine Genome Center-Mindanao Satellite Facility (College of Science and Mathematics, UP Mindanao, Davao City with all materials and services needed for operation
- 5) 3-year warranty on all parts and services, including annual preventive maintenance for the duration of the warranty period

**XIII. Voice recorder (1 unit)**

**Specifications:**

- 1) With at least 4 GB internal memory, expandable to 32 GB with micro SD
- 2) With built-in USB connector

**Inclusions:**

- 3) Shipping of each unit to Philippine Genome Center-Mindanao Satellite Facility (College of Science and Mathematics, UP Mindanao, Davao City), with all materials and services needed for operation
- 4) 1-year warranty on all parts and services

**XIV. Proximity door access control (3 units)**

**Specifications for each unit:**

- 1) With fingerprint access control
- 2) With reader/controller
- 3) With capability to store at least 500 fingerprint entries
- 4) With capability to store at least 500 card entries
- 5) Can read fingerprint/password/card
- 6) With push button for exit
- 7) With electromagnetic lock, 12VDC operating voltage
- 8) With ZL bracket
- 9) Regulated power supply, 12 VDC for lock
- 10) With cables necessary for operation (e.g. power cables)
- 11) With emergency opening mechanism in cases of power outage, etc

**Inclusions:**

- 12) With at least 25 proximity cards with customized printing
- 13) Shipping of each unit to Philippine Genome Center-Mindanao Satellite Facility (College of Science and Mathematics, UP Mindanao, Davao City), Installation by Field Service Engineer and all materials needed for installation and system setup
- 14) 3-year warranty on all parts and services, including annual preventive maintenance for the duration of the warranty period

**XV. Microsoft Office (3 units)**

**Specifications for each unit:**

- 1) At least Microsoft Office 2019 version
- 2) With multi-user (for 5 individuals) license

**Inclusions:**

- 3) Shipping of each unit to Philippine Genome Center-Mindanao Satellite Facility (College of Science and Mathematics, UP Mindanao, Davao City), with all materials and services needed for operation