

## **6. SPECIFICATIONS FOR COMPUTERS AND ACCESSORIES**

- General Specifications
- Technical Specifications

## GENERAL SPECIFICATIONS FOR OFFICE EQUIPMENT

Office equipment shall meet the following general requirements with regard to the performance and operation unless otherwise stated under particular specifications.

- |                                                                |                                                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating Voltage                                              | - 230 V, 50Hz .<br>5A or 15 A plug point will be provided by NWS&DB.                                                                                                                                                                                                                        |
| Voltage Fluctuation                                            | - Office equipment shall be capable of withstanding $\pm 10\%$ of voltage fluctuation.                                                                                                                                                                                                      |
| Noise                                                          | - Office equipment shall not produce excessive noise unacceptable for office environment.                                                                                                                                                                                                   |
| Guarantee and Free Maintenance Period                          | - All equipment shall carry a guarantee for a minimum period of one year (unless otherwise stated) from the date of installation, and all repairs which may become necessary during that period shall be attended by the contractor free of charge.                                         |
| Maintenance/repair work Following the free Maintenance period. | - All regular maintenance work during this period shall also be attended by the contractor free of charge.<br><br>The Bidder shall indicate the cost of maintenance work following free maintenance                                                                                         |
| Market Position                                                | - Period in an yearly basis in the questionnaire .<br>This cost is also considered at the time of evaluation<br><br>Preference will be given for the models and makes which are commonly used in Sri Lanka and for which consumable/repair parts are commonly available in the open market. |

## Technical Specification for Personal Computer System

Description	Minimum Requirement
Form Factor	Tower
Processor	Intel Core 2 Quad 2 GHZ Processor (2.00-GHz, 4MB L2 cache, 1066 MHz FSB)
L2 Cache	4MB L2 cache, 1066 MHz FSB)
Core Chipset	Intel Q 35 Express chipset or Equal
Hard Disk	160GB x 2 = 320GB SATA 3.0Gb/s 7,200rpm Hard Disk
Serial –ATA	4 serial-ATA Interfaces
Memory	2GB PC2-5300 DDR2 SDRAM 800 MHZ upgradeable up to 8GB
Network Interface	Ethernet – Integrated
Network Speed	10Mbps, 100Mbps, 1000Mbps Fast Ethernet Adapter
Graphics Type	2D / 3D Graphics with integrated 256MB
Video Memory	Intel Graphics Media Accelerator 3100
Sound	Integrated High Definition audio with 600w Speaker set
Expansion Bays	(2) 5.25" external bays and (2) 3.5" internal bays
Optical Drive	16X Internal DVD Writer or better
Diskette Drive	3.5" (1.44MB)
Key Board	PS/2 /USB Keyboard
Mouse	PS/2/USB Optical Scroll Mouse with pad
Monitor	17" LCD Monitor
Resolution	1024 x 768
Slots total free and type	2 full-height PCI slots, 2 full height PCI Express x1 slot, 1 full height PCI Express x16 slot
I/O Ports	1 Parallel, 1 Serial standard, 8 USB 2.0 (2 Front and 6Rear) Ports

<b>Description</b>	<b>Minimum Requirement</b>
Expansion Ports	External microphone, External Display, Keyboard, Line in, Line out, Mouse, RJ-45
Operating System	Windows Vista Business Down grade to Genuine windows XP Professional with Original User Licenses
Warranty	Three years comprehensive warranty.
Authorization	Manufacturer authorization letter should be provided
Eligibility	Manufacturer should have minimum of ten years experience in manufacturing of the same brand.
Serviceability	Manufacturer authorized service centre facilities should be available.
Manuals &CDs	Original Manual and Installation and Drivers CD for Each Desktop Computer

## TECHNICAL SPECIFICATION FOR 650 VA UPS

Description	Required Specification (Minimum)
Power Rating	650VA
Type	Line interactive sine wave
Input Supply	180V to 250V, Single Phase, 50Hz
Output Supply <ul style="list-style-type: none"> <li>• Voltage</li> <li>• Frequency</li> <li>• Wave Form</li> <li>• Distortion</li> </ul>	230V 50 Hz True Sine Wave Less than 5%
Battery Back-up <ul style="list-style-type: none"> <li>• Back-up time</li> <li>• Re-charge time</li> <li>• Battery type</li> </ul>	5-10 Minutes for full typical computer load  10 to 15 hours after fully discharged Replaceable maintenance free in built battery system
No of Sockets	02 Minimum
Protection	Overload, Over/Under Voltage, Battery Low
Noise	Noise less than 55 DBA
Indicators <ul style="list-style-type: none"> <li>• Visuals</li> <li>• Audible</li> </ul>	Line input, Overload, Inverter on/off, Battery low Battery in use, Overload, Battery Low
Warranty	(Minimum) two years including batteries
Spares	Availability of spare parts and after sales services
Popularity of model	Model shall be a popular one in Sri Lanka. Number of identical units sold in Sri Lanka shall be indicated.

## TECHNICAL SPECIFICATION FOR 600 VA UPS

Description	Required Specification (Minimum)
Power Rating	600VA
Type	Line interactive sine wave
Input Supply	180V to 250V, Single Phase, 50Hz
Output Supply <ul style="list-style-type: none"> <li>• Voltage</li> <li>• Frequency</li> <li>• Wave Form</li> <li>• Distortion</li> </ul>	230V 50 Hz True Sine Wave Less than 5%
Battery Back-up <ul style="list-style-type: none"> <li>• Back-up time</li> <li>• Re-charge time</li> <li>• Battery type</li> </ul>	5-10 Minutes for full typical computer load  10 to 15 hours after fully discharged  Replaceable maintenance free in built battery system
No of Sockets	02 Minimum
Protection	Overload, Over/Under Voltage, Battery Low
Noise	Noise less than 55 DBA
Indicators <ul style="list-style-type: none"> <li>• Visuals</li> <li>• Audible</li> </ul>	Line input, Overload, Inverter on/off, Battery low Battery in use, Overload, Battery Low
Warranty	(Minimum) two years including batteries
Spares	Availability of spare parts and after sales services
Popularity of model	Model shall be a popular one in Sri Lanka. Number of identical units sold in Sri Lanka shall be indicated.

## TECHNICAL SPECIFICATION FOR 750VA UPS

Description	Required Specification (Minimum)
Power Rating	750VA
Type	Sine wave
Input Supply	180V to 250V, Single Phase, 50Hz/60Hz
Output Supply <ul style="list-style-type: none"> <li>• Voltage</li> <li>• Frequency</li> <li>• Wave Form</li> <li>• Distortion</li> </ul>	230V 50 Hz True Sine Wave Less than 5%
Battery Back-up <ul style="list-style-type: none"> <li>• Back-up time</li> <li>• Re-charge time</li> <li>• Battery type</li> </ul>	4-16 Minutes for full typical computer load  3 to 16 hours after fully discharged Replaceable maintenance free in built battery system
No of Sockets	04 Minimum
Protection	Overload, Over/Under Voltage, Battery Low
Surge energy rating	340 Joules
Noise	Noise less than 55 DBA
Indicators <ul style="list-style-type: none"> <li>• Visuals</li> <li>• Audible</li> </ul>	Line input, Overload, Inverter on/off, Battery low Battery in use, Overload, Battery Low
Warranty	(Minimum) two years including batteries
Spares	Availability of spare parts and after sales services
Interface Port(s)	DB-9 RS-232, USB, SmartSlot
Popularity of model	Model shall be a popular one in Sri Lanka. Number of identical units sold in Sri Lanka shall be indicated.

## TECHNICAL SPECIFICATIONS FOR SERVER UPS (2000VA)

Description	Required Specification (Minimum)	Bidder's Offer (Pl. Specify in detail, do not mention Yes/No)
Power Rating	2000 VA	
Type	Output should be in Sine Wave Form	
Input Supply	180V to 286V, Single Phase, 50Hz	
Output Supply <ul style="list-style-type: none"> <li>• Voltage</li> <li>• Frequency</li> <li>• Wave Form</li> <li>• Distortion</li> </ul>	230V 50 Hz True Sine Wave Less than 5%	
Battery Back-up <ul style="list-style-type: none"> <li>• Back-up time (Full Load)</li> <li>• Re-charge time</li> <li>• Battery type</li> </ul>	40 Minutes for full typical computer load 10 to 15 hours after fully discharged Replaceable maintenance free in built battery system	
No of Sockets	04 Minimum	
Protection	Overload, Over/Under Voltage, Battery Low, Replace Battery	
Audible Alarm	Alarm when on battery, Distinctive low Battery Alarm, Configurable delay	
Noise	Noise less than 45 DBA	
Dataline Protection	RJ-11 Modem/Fax/DSL Protection (2 Wire Single line), RJ-45 10/100 Base-T Ethernet protection	
Indicators <ul style="list-style-type: none"> <li>• Visuals</li> <li>• Audible</li> </ul>	Line input, Overload, Inverter on/off, Battery low Battery in use, Overload, Battery Low	
Warranty	(Minimum) 2 years including batteries	
Spares	Availability of spare parts and after sales services	
Product Data:	Make: Model: Country of Manufacture:	
Popularity of model	Model shall be a popular one in Sri Lanka. Number of identical units sold in Sri Lanka shall be indicated.	

## TECHNICAL SPECIFICATIONS FOR SERVER UPS (5000VA)

Description	Required Specification (Minimum)
Power Rating	5000 VA
Type	Output should be in Sine Wave Form
Input Supply	160V to 286V, Single Phase, 50Hz
Output Supply <ul style="list-style-type: none"> <li>• Voltage</li> <li>• Frequency</li> <li>• Wave Form</li> <li>• Distortion</li> </ul>	230V 50 Hz True Sine Wave Less than 5%
Battery Back-up <ul style="list-style-type: none"> <li>• Back-up time (Full Load)</li> <li>• Re-charge time</li> <li>• Battery type</li> </ul>	40 Minutes for full typical computer load 10-15 hours after fully discharged  Replaceable maintenance free in built battery system
No of Sockets	04 Minimum
Protection	Overload, Over/Under Voltage, Battery Low, Replace Battery
Audible Alarm	Alarm when on battery, Distinctive low Battery Alarm, Configurable delay
Noise	Noise less than 45 DBA
Dataline Protection	RJ-11 Modem/Fax/DSL Protection (2 Wire Single line), RJ-45 10/100 Base-T Ethernet protection
Indicators <ul style="list-style-type: none"> <li>• Visuals</li> <li>• Audible</li> </ul>	Line input, Overload, Inverter on/off, Battery low Battery in use, Overload, Battery Low
Warranty	(Minimum) 2 years including batteries
Spares	Availability of spare parts and after sales services
Popularity of model	Model shall be a popular one in Sri Lanka. Number of identical units sold in Sri Lanka shall be indicated.

## TECHNICAL SPECIFICATIONS FOR SERVER UPS (3000VA)

Description	Required Specification (Minimum)
Power Rating	3000 VA
Type	Output should be in Sine Wave Form
Input Supply	180V to 286V, Single Phase, 50Hz
Output Supply <ul style="list-style-type: none"> <li>• Voltage</li> <li>• Frequency</li> <li>• Wave Form</li> <li>• Distortion</li> </ul>	230V 50 Hz True Sine Wave Less than 5%
Battery Back-up <ul style="list-style-type: none"> <li>• Back-up time (Full Load)</li> <li>• Re-charge time</li> <li>• Battery type</li> </ul>	40 Minutes for full typical computer load 10 to 15 hours after fully discharged Replaceable maintenance free in built battery system
No of Sockets	04 Minimum
Protection	Overload, Over/Under Voltage, Battery Low, Replace Battery
Audible Alarm	Alarm when on battery, Distinctive low Battery Alarm, Configurable delay
Noise	Noise less than 45 DBA
Data line Protection	RJ-11 Modem/Fax/DSL Protection (2 Wire Single line), RJ-45 10/100 Base-T Ethernet protection
Indicators <ul style="list-style-type: none"> <li>• Visuals</li> <li>• Audible</li> </ul>	Line input, Overload, Inverter on/off, Battery low Battery in use, Overload, Battery Low
Warranty	(Minimum) 2 years including batteries
Spares	Availability of spare parts and after sales services
Popularity of model	Model shall be a popular one in Sri Lanka. Number of identical units sold in Sri Lanka shall be indicated.