

GOVERNMENT OF ZIMBABWE

MINISTRY OF LOCAL GOVERNMENT AND PUBLIC WORKS.



**BILL OF QUANTITY, (BOQ) FOR THE PROPOSED COVID – 19
RT-PCR TESTING INFRASTRUCTURE REQUIREMENTS**

PROJECT NUMBER: COVID – E/2020

REFERENCE NUMBER: E/MPILO

DATE 21/05/2020

1. PREAMBLE

The following fittings, materials and accessories complement the attached drawings prepared by the Ministry of Local Gvt, & Public Works for the **Supply of Uninterruptible Power Supply Units for the RT-PCR TESTING CENTER**

2. GENERAL REQUIREMENTS FOR MATERIALS AND EQUIPMENT

2.1.1. The UPS shall be an **on-line**, solid state type and of the latest commercial type and design. The UPS shall be able to provide high quality power conditioning and back-up power protection.

The Contractor shall take due account of the altitude, temperature and humidity that is in Bulawayo and shall provide UPS sets which shall need,

- Nominal input voltage of 230V Single phase
- Input frequency of 45-65Hz
- Input connections of Single Phase
- Input voltage range for main operation of 220 – 240V
- Input total harmonic distortion, less than 3% for full load
- Type of input protection required is a Single pole breaker
- Battery type is VRLA or any other approved by the Permanent Secretary.

2.1.2. The UPS shall be capable of producing

- nominal output voltage of 230V Single-phase,
- output voltage distortion less than 2%,
- output frequency of (synchronous to mains) 50/60 Hz,
- Output voltage THD of less than 2% linear load and less 3% non linear load.
- Overload operation of 10 minutes at 125% for 30 seconds at 150%
- Bypass is a built in maintenance bypass

The output voltage of 230V, 3 wire single phase, 50 Hz rating shall conform with ISO 3046 and BS 5514 and BS 7671: 1992 IEE Regulations Chapter 55.

2.1.3. Energy use / Efficiency LOAD	EFFICIENCY
25%	87.0%
50%	91.9%
75%	93.1%
100%	93.2%

2.1.4 SYSTEMS CONTROL, INDICATORS AND ACCESSORIES

The UPS shall have a

- Panel LCD Display. The UPS control panel shall provide a LCD display. The indication of UPS status, battery status, alarm event log and advanced operational features will be available.
- Systems Parameters Monitored (Data displayed).

2.1.5 PART AND SERVICES

The UPS set supplier shall be an authorized dealer by the UPS set manufacturer and shall be factory trained and authorized to provide services and parts of UPS sets at any time during the day or night. A description of the service and parts support capability shall be included with submittal.

2.1.6 MAINTENANCE

The successful Tenderer shall furnish two copies of operating and maintenance instruction and illustrated parts books covering the UPS sets and auxiliary equipment which will require operating instructions and periodic maintenance.

The Tenderer shall also offer operating and maintenance training to the technical team from the Ministry of Local Gvt and Public Works.

The UPS set supplier shall include in his tender for visiting the building on a monthly basis for the first 6 months from the date of practical completion to run the set to ensure that it is kept in good working order.

2.1.7 WARRANTY

The units offered under this specification shall be covered by the Manufacturers Standard warranty or Guarantee on new equipment and shall include 100% parts and labour coverage

3. Materials and fittings

No.	Item Description	Qty	Installed Price
1	2.5Kva UPS complete with 2 Battery Backup	1	
2	3Kva UPS complete with 2 Battery Backup	3	
3	5Kva UPS complete with 5 Battery Backup	2	
	Sub Total		

4. SUMMARY

No.	Item Description	Total Installed Price.
1	Subtotal bill no. 1	
6	Add VAT	
7	Grand Total	

11. BID PRICE

The Contractor/Bidder must state the Grand Total in words.

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