Specifications for Biosafety cabinet 4 feet width

1. System must work on laminar air flow technology Vertical.
2. System should be class II Type A2 with 70% recirculation and 30% Exhaust by HEPA filter having working area minimum 4 ft with filter monitoring system. System should come with Stand from same OEM company.
3. System should be 99.99% efficient supply and exhaust HEPA filters of industry standard sizes and front accessible for economical and easy replacement.
4. It should have Inbuilt fumigation port for decontamination not by PAN. System should have 254 nm UV lamps for decontamination of germs.
5. Nominal inflow velocity of 105 feet per minute (fpm) (0.5 m/sec) Nominal down flow velocity of 55 fpm (0.3 m/sec)
6. Approximately 70% air recirculation by HEPA Filter
7. Interior-mounted, line-of-sight color display LCD information center with "Filter Life Remaining" bar graph, status line for alarm conditions and alerts to warn when filter life diminishes to 20%, 10% and 0%
8. Filter monitoring system consisting of an electronically commutated motor (ECM) that delivers a precise volume of air as required and automatically adjusts as filters load without relying on airflow sensors
9. Built-in interval or elapsed time for experiment monitoring, fluorescent light or UV light control
10. Touchpad control on right-hand side post for manual activation of blower, light, timer, audible alarm mute and menu selection.
11. Radiuses type 304 stainless steel interior and removable, seamless, dished work surface with lift out knobs
12. Service fixture one no with ball-type valve Epoxy-coated steel exterior
13. Towel catch located under work surface Contain-Air Negative Pressure Channel
14. Class 5 conditions per ISO 14644-1 and 2 (formerly Class 100)
15. Supply and exhaust 99.99% efficient HEPA filters.
16. One electrical duplex receptacle, covered by stainless steel splash covers. System should have RS232 port to transmit the data.
17. Fully-closing, clear 1/4" tempered safety glass sash with two sash handles; counterbalanced, anti-racking mechanism; and 10° slope.
18. 8.0 inch working sash opening height.
19. Curved stainless steel inlet grille with Reserve-Air Secondary Airflow Slots or Arm Rest type.
20. Bright, 90-100 foot candle, glare-free fluorescent lighting located outside the contaminated work area.
21. Intrinsically safe negative pressure design
22. System should allows the user to program start up and shut down operations when the sash is raised or lowered
23. System should have the function that idles the blower when the sash is fully closed System should have Full five year warranty.
24. CE conformity marking and work on 230 volt.
25. This should be complete unit including the base stand from the same manufacturer to comply NSF49 certification.
26. System should come along with the entire necessary accessory and should be ready to work.

27. **Other Important Requirements**

    a. Five Years on site comprehensive warranty with 2 years free AMC and availability of spare parts for next ten years after installation.

    b. The spare parts/wear & tear consumables, if any, required for trouble free operation of equipment for 5 years shall be included

    c. Installation will be done at free of cost at the site and local Service Support should be within 4 days of report

28. Additional features/accessories if any that can potentially increase the productivity and safety of the instrument should be quoted as optional items including-American Style Universal Service Fitting for Air/Gas/ Vacuum/Nitrogen, Aspirator or suction flasks connected with vacuum pump (max power 400 to 600 W, max vacuum 650-750 mmHg, horse power 1/6 to 1/4 HP), Touch-O-Matic (one switch ON/OFF) Bunsen burner, and Ergonomic lab chair.