



Ref: NCB/F-200726/2020-2021 (N)

Specification for PCR Machine

1. System should have Asymmetric independently controllable two/three blocks with total 96 well
2. System should have block to accommodate PCR tube / strips of 0.2 ml, 0.5 ml.
3. System should have well block which is capable of testing temperatures at Denaturation, Annealing and Extension steps.
4. System should be capable to run eight different temperatures at a time with minimum 12°C gradient range.
5. System should be implemented with gradient technology to ensure identical ramp rates in both gradient and normal operations.
6. System should have gradient temperature ranging from 30°C to 99°C.
7. System should have heating and cooling of block through Peltier technology.
8. System should have block temperature control ranging from 4°C to 99°C.
9. System should have fast, standard and safe temperature control modes for operation.
10. System should have lid temperature ranging from 37°C to 100°C.
11. System should have block temperature accuracy of minimum or better than +/- 0.2°C
12. System should have block homogeneity of minimum or better than +/- 0.4°C.
13. System should have heating rate of minimum 3°C/s and cooling rate of minimum 2°C/s.
14. System should be incorporated with Flex lid technology to accommodate PCR tubes with flat or domed caps.
15. System should have option for thermal sample protection to maintain the block at lower sub-optimal temperatures until the lid reaches the desired temperatures.
16. System should have an option to export the data collected to the USB in excel format, pdf format or any suitable format which will be compatible to open in the computer system to analyse the data.
17. System should operate at 230 V/ 50 Hz.
18. System should have calibration certificate according to NIST (USA), DKD/PTB (Germany), UKAS/NPL (UK), UL/CUL Listed.
19. The system should be CE/ ISO certified.
20. The system should have the warranty for 3 years.
21. The system should be supplied with all accessories required to function.
22. The product should be as per CE/IEC guideline and certificate from authorized body should be submitted. No self-declaration will be accepted.
23. The service team should be in Bangalore. Contact details of Engineer should be submitted with this offer
24. The system should be installed by the trained Engineer and users should be trained on Application, operation and maintenance.
25. Compliance to each of the above points should be separately indicated and evidence presence for each of them (Product brochures should be highlighted wherever required).
26. The past performance/service support in NCBS/instem/ccamp should be satisfactory and the technical evaluation will be done accordingly.