

Dual blockgradient PCR system

1. Universal dual block with 64 and 32wells
2. Block should accommodate PCR tube strips, 0.2ml & 0.5 mL PCR tubes or divisible PCR plate
3. At least there should be 200 installations of offered system in India.
4. Should be capable of testing temperatures at Denaturation, Annealing & Extension steps
5. Should have 12°C gradient range
6. Gradient technology should ensure identical ramp rates in both gradient and normal operation
7. Gradient temperature range from 30 – 99°C
8. Heating and cooling of block must be through peltier technology
9. Should use patented Triple Circuit Technology ensuring precise control of temperature
10. Block temperature control range must be 4°C to 99°C
11. Fast, Standard and Safe' temperature control modes are must
12. Lid Temperature range: 37 - 110 °C
13. Block Temperature Accuracy: $\pm 0.2^{\circ}\text{C}$
14. Block Homogeneity: $\leq \pm 0.3^{\circ}\text{C}$ (20°C to 72°C); $\leq \pm 0.4^{\circ}\text{C}$ (90°C)
15. Heating rate: 3 °C/s; Cooling rate: 2 °C/s
16. Lid descent and closing pressure must use Flexlid technology with Thermal sample Protection (TSP) to accommodate PCR tubes with flat or domed caps
17. Should have large display with Intuitive Graphic programming
18. Should have Administrator and user login with or without PIN for enhanced security
19. Inbuilt advance scheduling feature for users convenience will be a preference
20. Preprogramed protocol templates for easy selection
21. Should have Time or Temperature increment with cycles in PCR program
22. Adjustable ramp rate is must to meet critical amplification conditions
23. Customized programming allows a maximum of 20 steps and 99 cycles
24. Auto Restart facility with user defined time interval when power fails and resumes
25. Instrument status indicating the step, cycle and remaining runtime during the run
26. Should display Runtime in larger font for better view from distance
27. Should have Two USB ports: for Protocol transfer, Self-test, USB, printer / mouse
28. Should have Log book function for error messages and new calibration
29. E-mail Notification
30. Power save Standby function
31. Cooling vents at bottom and rear allow placing other instruments in limited bench space
32. System should have provision to connect any TWO other systems (96-well block, 64/32 dual block, and/or flat block) for ultimate throughput
33. Optional Self-test dongle to check functionality of all 6 peltier elements
34. Interface: USB, Ethernet, CAN in, CAN out
35. Dimensions (W x D x H) in cm: 25 x 41.2 x 33
36. Weight: 11 kg
37. Maximum power consumption: 700 W
38. Calibration according to NIST (USA), DKD/PTB (Germany) UKAS/NPL (UK), UL/cUL listed
39. Should comply to RoHS (2011/65/EU)
40. Two year warranty
41. Online UPS with 1 hour back should be supplied with PCR machine
