

Department of Bacteriology

Technical Specification for PCR Thermocycler

Quantity – 1 No

S.No	Technical specification	Complied (yes or No)	If compliance given, mention the page no. of your technical document where the details are provided
1.	Thermocycler, Peltier elements.		
2.	Block for 96 × 0.2 ml tubes; possibility to use block with 48 × 0.5 ml tubes and 96-well PCR plates.		
3.	Blocks must be resistant to oxidation.		
4.	Heating rate: 4 °C/s.		
5.	Cooling rate: 2 °C/s.		
6.	Temperature range (block): 4–100 °C.		
7.	Regulating accuracy for block temperature: ±0.1 °C.		
8.	Temperature uniformity at 70 °C (block): ±0.4 °C.		
9.	Internal memory for at least 50 programs with up to 99 steps/program, freely editable.		
10.	Heatable lid with automatic height adaptation.		
11.	Electromechanical lid blocking to prevent accidental opening during a run.		
12.	Temperature range for lid: 80 °C to at least 103 °C.		
13.	Optional: Interface for remote control via PC; activated RS 232 serial port		
14.	<p>Electricity requirements</p> <p>Supply voltage: 230 ± 10 V, AC, 50/60 Hz.</p> <p>Voltage and plugs to be adapted to meet the country requirements. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.</p>		
15.	<p>Manufacturer's certificate</p> <p>The manufacturer must have a management system certified to ISO 9001.</p>		
16.	One certificate to state that the thermocycler has been calibrated at the factory and certified according to ISO 13485 quality regulations		
17.	Appropriate UPS with 2 hours back-up to be supplied		
18.	Warranty: standard warranty of one year should include calibration, CAMC for 2 nd and 3 rd year and AMC for the 4 th year		