ANNEXURE
Technical Specifications

1	**Horizontal and vertical gel apparatus :** • **Isoelectric focusing unit :** Includes one IEF -100 unit, one sealed bag of 252 wicks , one running tray ,one rehydration tray, one cleaning brush ,one set of forceps and ten sets of running cups (each set containing 6 sample cups) • **Mini Deluxe Vertical Unit:** Lower Buffer Chamber, Upper Buffer Chamber / Cooling Core Safety Lid with High Voltage Leads, Casting Cradle w/Sealing Gasket Set, Casting Clamp Assemblies-2pcs. Cams-4 pcs, Glass Plates, Rectangular, 10x10.5 cm-10 pcs, Alumina Plates, Notched, 10x10. Cm-5 pcs, Spring Clamps, Red - 4 pcs, Combs, 10-well – 2 pcs, T-Spacers, 0.75-mm thick-4 pcs, Well-Locating Decals-2 pcs, Gel Seal. • **T-Spacers**, 1.0 mm Thick • **Power Supply**: 10-300 V, 4-500 mA, 90 W
2	**Trans blot apparatus:** • Includes 2 gel holder cassette, 4 fiber pads, modular electrode assembly, Bio-Ice cooling unit, lid with cables,Gel size- 10 x 7.5 cm, buffer requirement 450 ml, Gel capacity 4 using Protean Tetra cell, transfer time < 1 hr, electrode 4 cm apart for strong electrical field and efficient protein transfer. Color coded cassettes and electrode for proper orientation of gel
3	**PCR / Thermocycler** Versatile efficient System with Block for 96 x 0.1/0.2ml PCR Tube, 70 x 0.5 block, and One 8x12 PCR plate (Semi skirted, Un skirted and fully skirted as per SBS standard) Gradient PCR, capable of testing 12 different temperatures simultaneously across a gradient range of 1 - 20° C System should have Steady Slope Gradient Technology ensures ramp rates are identical in both gradient and normal operation Heating and cooling via peltier technology. Triple Circuit Technology, ensures precise control of temperature Temperature control range: from 4 °C to 99°C Temperature Control Mode: Fast, Standard and Safe Lid Temperature range: 37 - 110 °C Block Temperature Accuracy: ± 0.2°C Temperature control speed: approx. 3 °C/s (heating) Temperature control speed: approx. 2 °C/s (cooling) Lid descent and closing pressure – Flexible lid with Thermal sample Protection Intuitive Graphic programming with larger display Administrator and user login with or without PIN for enhanced security Booking schedule allows users to reserve the instrument in advance Preprogramed template for easy selection from 16 temperature protocols viz. 2 step PCR, 3Time or Temperature increment with cycles in PCR program Adjustable ramp rate from 0.1° C to 3.0° C to meet critical amplification conditions Customized programming allows a maximum of 20 steps and 99 cycles Auto Restart facility with user defined time interval when power fails and resumes

Instrument status indicates the step, cycle and remaining runtime during the run
Runtime display shows remaining time in larger font for better view from distance
System memory of more than 100 User folders and more than 700 programs also provide the External card for Easy transfer the data between different cyclers.
Two USB ports: for Protocol transfer, Self-test, USB, printer / mouse
Log book function for error messages and new calibration
Option to connect up to TWO another Machine for ultimate throughput.
Interface: Ethernet, CAN in, CAN out
Dimensions: Not more than W: 44 cm, D: 78.5 cm, H: 62.5 cm
Power supply: 230 V, 50-60 Hz
Power consumption: 855 W

4

Inverted microscope

Optical System	Infinite Optical System	
Viewing Head	Seidentopf Trinocular Head Inclined at 30°, Interpupillary 48-75mm	
Eyepiece	High-point, Extra Wide Field Eyepiece EW10×/ 22	
Nosepiece	Quintuple Nose piece	
Objective	Long Working Distance Infinite	4×/0.1, WD 18mm
	Plan Objective	40×/0.6, WD 2.6mm
	Infinite Plan Phase Objective	PH 10×/0.25, WD 10mm
		PH 20×/0.4, WD 5.1mm
Condenser	Extra Long Working Distance Condenser NA 0.3, LWD 72mm	
Focusing	Coaxial Coarse and Fine Adjustment, Vertical Objective Movement, Coarse Stroke 37.7mm per rotation, Fine Stroke 0.2mm per rotation	
Stage	Plain stage 160×250 mm Glass Insert	
Illumination	Halogen Lamp6V/ 30W	
Filter	Blue/ Green and Frosted GlassFilter (ϕ45mm)	

Reflected Light Source		**Excitation**	**Dichroic Mirror**	**Barrier Filter**
	Blue excitation	BP460～ 490	DM500	BA520
	Green excitation	BP480～ 550	DM570	BA590
Lamp	100W HBO Ultra Hi-voltage Spherical Mercury Lamp			
Protection barrier	Barrier to Resist the Ultraviolet Light			
Power Supplier	Power Supplier NFP-1, 220V/ 110V interchangeable, Digital Display			
Immersion Oil	Fluorescent Free Oil			

Camera:

- Real scientific-grade Color/mono CCD image sensor with high sensitivity and low image noise, no compression, no interpolation;
- Perfect image quality and high dynamic range with the perfect detail;
- High speed image preview and fast focus;
- High-speed USB2.0 interface, up to 480Mb/s;
- Support uncompressed, compressed videos:
- Provide completed API for users' Secondary development, provide Demo Source Code;
- Hardware automatic gain control (AGC) and Exposure Control (AEC);

	• Software auto white balance, auto exposure, continuous auto exposure control; • Support Windows XP / Vista / 7 Operation System;
5	**<u>Micropipette:</u>** • Volume adjustment: only a few terns to reach your desired volume. • Control button: very low operating force, colour indicating pipette volume, positioned for perfect ergonomics. • Ejector: very low operating force, positioned for perfect ergonomics. • Volume display: 4 digits, magnifying shape. • Secondary adjustment display and opening. Adjust your pipette to a liquid very different than water. • Quick connection clip: remove lower part easily (not in 5 ml, and 10 ml). • Spring loaded tip cone: improved ergonomics, tight fit to the tip (not in 5 ml and 10 ml). • ISO certified.
6	**Water Purification Unit:** Conductivity: 0.055 µS/cm (≅18.2 MO+cm) TOC content: < 5 ppb – Microorganisms: < 1 CFU/ 1,000 ml Particle : < 1/ ml