Real time PCR

Item	Make	Model
Real Time PCR Machine	BioRad	CFX CONNECT System

- Real time PCR with **block of 96 x 0.2 ml tubes or plate to Run typical 0.2ml tubes, strips, and plates.**
- Should have a gradient capacity with **Dynamic ramping.**
- Detection of 3 different fluorescent reporters in the same tube.
- Should be capable of Detecting FAM/Sybr Green, and VIC, HEX, TET, CAL Fluor Gold 540 etc.
- Maximum Ramping speed : 5 ^{O}C per sec with an **average ramp rate of 3.3degC/Sec.**
- Should have **6 Peltier Cooling & Heating for uniform temp control**
- Should have one channel dedicated for FRET experiments
- Should have a mass reduced honeycomb block to offer better average ramp rate and 10 sec of settling time.
- **Excitation –Emission range: 450- 580nm**
- No internal reference dye should be required. True **2 Color Multiplexing with use of 2 different flourophores without the need of addition of any internal reference dye**.
- Should have 3 filtered LEDs as an excitation source with 3 filtered Photodiodes for detection.
- Dynamic range of 9 orders.
- **Open system capable of running various chemistries so that Different chemistries using TaqMan, Molecular Beacon, SYBR green etc all can be performed.**
- Temperature range 0– 100 ^{O}C with accuracy of ±0.2 ^{O}C and **uniformity of ±0.4 ^{O}C within 10 sec of arrival at 90 ^{O}C**
- Sample volume should be 1-50µl
- Should have built in data analysis modules with advance features like well highlighting, QC flags and custom data view assist with quick analysis.
- Should be capable to perform Automatic allelic discrimination by end point fluorescence or threshold cycle.
- Should be capable to perform Gene expression analysis by relative quantity (ΔCt) or normalized expression (ΔΔCt).
- Comparison of upto 5000 Ct values from different data files should be possible
- Should have the feature of **Email notification with data file after run completion.**
- Software should have express load feature which allows entry of data after experiment.
- **Should be licensed for Research & IVD applications.**
- **System should be compliant with the MIQE Guidelines**
- System should provide an additional **qbase plus software license which is RDML compliant**
- Software should be compatible with all computer operating systems including Microsoft windows, Mac and Linux.
- Software should be capable to import and analyze data from any real time PCR platform.
- With these accessories as FOC - compatible power back up (minimum 2Kva online UPS), PC with minimum i5 processor and original windows 10 operating system, softwares, Factory calibrated and true gradient