

INDIAN INSTITUTE OF TECHNOLOGY BOMBAY MATERIALS MANAGEMENT DIVISION Powai, Mumbai 400076.

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Technical Specification of Biosample Analyzer

(BIOSAMPLE ANALYZER (Automated electrophoresis system for quality control of DNA, RNA samples for NGS QC work flow))

as per below mentioned configuration and specifications:

- 1) Should be Unique system for the analysis of genomic DNA and other nucleic acid samples by proprietary small-scale gel electrophoresis.
- 2) Should process 1 to 16 samples per Run.
- 3) Sample loading from two 8 tube strips.
- 4) Should require Requires only 1 to 2 μ L of samples per run—even for high sensitivity analysis.
- 5) System should come with software including electronic user information.
- 6) System should come with Accessories like (Vortex Mixer, Tube Strip Holder, Tip Waste Bucket, USB cable, etc.)
- 7) System should come with Start-up kits for standardisations.
- 8) System should be capable of doing rapid analysis results should be available within 1 to 2 min per sample with reliable reproducible results within 20 min for 16 samples.
- 9) System should offer unattended walk away operation with fully automated sample processing for up to 16 samples.
- 10)System should have screen tape tool for hardware diagnosis of all the tape station instruments.
- 11)System should offer full range of below applications for all the steps in any NGS work flow,
- 12)Integrity standards for RNA (RNA Integrity Number equivalent, RINe) and genomic DNA (DNA Integrity Number, DIN)
- 13)QC of cell-free DNA with qualification based of the calculation of %cfDNA.
- 14)QC of fragmented genomic DNA e.g. DNA extracted from FFPE tissue.
- 15)QC of adapter ligated and amplified NGS libraries.
- 16) Analysis of post-capture amplified libraries after target enrichment.
- 17)Computer/Lap top with specifications similar to I5-

8350CPU@1.7Ghz/1.90GHz,8GB RAM, Win 10 Pro 64 bit needs to be provided Locally from India.

18) Warranty: 3 year-on site- for entire equipment and accessories.