

Sr.	Detailed Specification of the Stores	Quantity
1.	<p><b><u>Bio-layer Interferometry (BLI) Affinity Measurement Device</u></b></p> <ol style="list-style-type: none"> <li>1. Simple dip and measure format based on label-free Biolayer Interferometry principal.</li> <li>2. Should complement existing lab methods such as blots and gels, and give real-time binding curves for visual confirmation rapidly.</li> <li>3. Provision to use single sample at a time.</li> <li>4. Capability to use the sample in drop mode and tube mode (The ligand solution can be used as a drop or in a tube in order to study the binding with immobilized biomolecules both from purified samples and or diluted samples).</li> <li>5. Capable of immobilizing biomolecules through their interaction with respective antibodies, ligands and or by chemical interactions, covalent and non-covalent interactions.</li> <li>6. Should be able to quantitate the binding molecules- proteins etc from purified as well as crude samples based on label-free Biolayer Interferometry principal.</li> <li>7. System should work without any use of dye or labeling agent for detection of biomolecule-ligand interaction.</li> <li>8. Capable of binding Kinetic study- should measure association and dissociation rate constants and affinity of binding events (<math>K_a</math>, <math>K_d</math>, <math>K_D</math>).</li> <li>9. Detection should be independent of Refractive Index, pH or other changes in solution.</li> <li>10. Detection should be purely on interaction of analyte to sensor and should not be affected by RI, pH and other molecules in solution to ensure specificity and reproducibility.</li> <li>11. Different sensors to study different biomolecules for eg. His tag proteins, antibodies, GST tag proteins and more generic Biotin tagged proteins should be available and also have possibility of customizing if and when required.</li> <li>12. Analysis of crude sample, cell lysate, serum samples etc. should be possible.</li> <li>13. Sample volume required for analysis in drop mode should be should be 5 microliterl or lesser and in the tube mode should be 500 microliter or lesser.</li> <li>14. Real time data acquisition and monitoring should be possible.</li> <li>15. Should be provided with the Analysis Software for both quantitation and kinetics experiments.</li> <li>16. Suitable computer and online UPS for backup should be provided.</li> <li>17. should be quoted with 5 years warranty. All the biosensors, and reagents should be quoted as optional items.</li> </ol>	1