

| S. No | Description   | Requirement   |
|-------|---|---|
| 1.    | Measuring Mode  | Optical Rotation, Specific Rotation, Concentration, Sugar Degrees and any others  |
| 2.    | Measuring Angular Scale   | ± 89.9 Deg Arc Optical Rotation   |
| 3.    | Accuracy:   | 0.002 Deg Arc up to 10 Deg<br>±0.004 Deg from 10 deg to 89.9 deg Arc Optical Rotation.  |
| 4.    | Resolution  | 0.001 deg Arc   |
| 5.    | Reproducibility   | 0.002 deg Arc   |
| 6.    | Prism   | Best in the market with life time guarantee   |
| 7.    | Temperature probe Range   | 10 to 100 °C  |
| 8.    | Temperature probe Accuracy  | ± 0.1 °C  |
| 9.    | Light Source  | Tungsten Halogen Lamp for all wavelengths   |
| 10.   | Wavelength  | Minimum two fixed wavelengths (589 nm & 546 nm preferred) with an option to upgrade to other wavelengths (up to 5 fixed wavelengths) in future. |
| 11.   | Temperature control   | Automatic Electric heating & cooling 15 <sup>o</sup> to 40 <sup>o</sup> with an accuracy of +/- 0.2 °C  |
| 12.   | Sample cell   | 100 mm glass cell of 6ml volume, 10mm glass cell of 0.05ml volume   |
| 13.   | Temperature validation cell   | Temperature validation cell is required   |
| 14.   | Calibration Standard  | NIST standards  |
| 15.   | Sample chamber  | Be able to accept sample tubes upto 200mm   |
| 16.   | Inbuilt computer  | Preferred - System with built computer with dedicated storage space (>5 GB)   |
| 17.   | Calibration   | Automatic Calibration preferably via Touch screen   |
| 18.   | Communication interface   | Minimum 3 USB ports, Ethernet port for Network Connection and any additional features   |
| 19.   | Installation & training   | Installation, commissioning & training by trained service engineer should be offered free of cost.  |
| 20.   | After sale service  | Should be provided within 24 -48 hours when required by trained service engineer  |
| 21.   | Warranty  | 1 Year warranty after installation & 1 Year AMC free after warranty period.   |
| 22.   | Quote sample cells of different dimensions as optional (with and without temperature control) from 10 mm cell length till 100 mm cell length.   |   |
| 23.   | A vendor has to provide the list of renowned Indian Institutes/Universities/Industries where the machine has been installed and vendor must provide documentation related to installation. Models from firms providing local service and support will only be considered. |   |

