**Vapour Liquid Equilibrium (VLE) Determination Apparatus**

The vapour-liquid equilibrium (VLE) determination apparatus should be useful to measure and determine the equilibrium data and to evaluate the equilibrium curves for two­ component or multi-component mixtures. The VLE system should have facility to be used at atmospheric conditions, the necessary valves, sensors and safety devices should be built in the cased basic frame. Apparatus should be built with microprocessor controller for precise and reliable operation.

**Technical Data:**

|  |  |
| --- | --- |
| Operation Temperature :  Temperature Accuracy : | Room temperature to 150° C  0.05 ° C or better for both liquid and vapour phase.  Preferably using temperature sensor Pt-100 |
| Operation Pressure : | Atmospheric pressure  Other pressure range can be quoted as accessories and should be quoted with separate options each |
| Operating Volume | Up to 100 mL |
| Input Voltage | ~230V AC |

**The VLE apparatus consists of:**

|  |
| --- |
| Phase-equilibrium control device with operating safety, reproducibility and reliability.  Display unit and operation software for the control of temperature  Universal glass apparatus, evaporation (by means of electrical immersion heater) and mixing chamber (with electrical stirrer drive) and vacuum-tight screwing for sample take-off by means of the syringe  for liquid and vapour phase  Mounting frame for all unit parts including Valve plungers, sample take-off valves, filling funnel and final receivers |