

Technical Specifications

2. Gas Chromatograph

1. Microprocessor Controlled Gas Chromatograph with a large oven of around 22.L to install all types of columns. Provision to mount maximum 4 injection ports it should be fully controlled by BY GC key board or External PC
2. Vendor to quote dual packed injection port ports with provision to upgrade it to two more additional Capillary / PTV / Packed injection port.
3. Electronic pressure / flow control for capillary carrier & Mass Flow controller for Packed Carrier Gas Flow.
4. LCD Graphical display with feather touch button control for all parameters for – injector, detector and oven etc.
5. Temperature range for oven is -99°C to 500°C (with Cryo Option) with dual oven heat protection one by user and another factory set.
6. Microprocessor temperature programmer with heating rate of 0.1°C/minute to 70°C/minute.
7. Provision for automatic cooling through automatic dual flop using stepper motor Cooling from 400°C to 50°C within 6 min
8. Method files : 50 files should be stored in the standalone GC.
9. Auto Diagnostics : Checks, corrects, operations and status of GC control, RAM, ROM, CPU Sensor, Keyboard and live Auto Diagnosis while Starting and while Running.
10. 32 bit windows 2000 / XP based chromatography integration software with PC and Printer. Software should control all GC parameters
11. TCD with Control ,TCD made of two or four filament to connect with packed or capillary columns.
MDL: <800 pg C12/ml He, Sensitivity: 10 μ V /ppm for Nonane , Linear Dynamic Range: >10⁻⁴ Maximum Temperature: 400 C
12. Chromatography Software should be 21CFR part 11 ready with GC control
13. Should have provision to mount Auto liquid sampler with min 8 vials capacity. The system is rugged, and ease of use fulfill the needs of both QA/QC, with high-throughput .Upgradable with 150 plus vials tray in future. All the compliant with the latest Restriction of Hazardous Substances (RoHS) requirements for hazardous substances in electrical and electronic equipment. Syringe 10 ul capacity
14. Vendor to quote all necessary accessories like packed column, Capillary column, interconnecting tubing's for installation of the GC with Cylinders and Regulators.
15. Gas Chromatograph should be upgradeable with detectors like FPD FID, 2nd TCD and DID .



16. GC should be compatible with Accessories like Auto Sampler, Head Space Sampler, Auto sampler cum Head Space Sampler in one GC & should have facility to use with Two GC by having Extended Platform. GC also should be compatible with Auto Gas Sampling Valves, Thermal Desorber, Purge & Trap, and Pyrolyzer etc.
17. The system should be ready with automatic, Gas sampling valve column isolation valve ,by pass valve for Methane , CO₂, Hydrocarbon.
18. All Installation accessories like Latest I5 PC with Licensed version s/w, B/w Laser Printer, UPS – 5KVA with 30 min backup, H₂ cylinder with regulator, Air cylinder with regulator, Gas purification system, tubing, cylinder bracket, Calibration Gas Cylinder / Canister - etc

