



microFAST GC™ SPECIFICATIONS

Copyright 2004, Analytical Specialists, Inc.

Operating Environment

Operating Temperature Range: 0C to 35C
Storage Temperature Range: -20C to 60C
Relative Humidity Range: 0 to 100% (non-condensing)

Power Requirements

Typically 150 watts peak power, practical use < 100 watts for semi volatile analyses, < 50 watts for VOCs
24 VDC supplied to the unit from external power pack or other DC source
100-240VAC using AC to 24V DC converter

Carrier Gas Supply

40 PSIG, 99.995% H₂ at up to 100ml/min

Sample Requirements

Air or gaseous samples at 0 to 30 PSIG at ambient temperature
Water or soil gas for VOC/SVOC analysis
Membrane, SPME and static and dynamic headspace extracts
Analytes in organic solvents (DCM, Hexane, MEK, Toluene, methanol, etc.)

Dimensions

9.25" wide by 15.5" deep by 7" high, 10lbs in weight
Uninterrupted power supply and data acquisition computer external to the base unit

Controls/Outputs

All functions and parameters controllable and readable through RS232 using EZChrom Software™
Start analysis from keyboard
Set method from external computer using EZChrom Software
100Hz digitization on each column, 24 bit resolution, auto zero on each run
Trigger in and ready out signals

Front Panel Displays

Temperature and pressure readings, valves status
Power on/off
Status of analysis columns (isothermal, programming, cool down, ready)

Standard Equipment

Two capillary columns, 1m to 3m long, 100μ to 320μ ID,
Temperature programmable from 0.1 to 25°C per second from ambient to 350°C (isothermal also available)
Flame ionization detection
Temperature controlled solid sorbent trapping injector (ambient to 300°C)
Heated inlet with vacuum pump sample introduction onto sorbent trap for gas samples
Heated inlet with internal carrier gas purge of injector for use with SPME
Liquid inlet for syringe injection of organic liquids

Performance

Repeatability of ± 1 to 3% in quantitative determinations
Repeatability of ± 0.1 to 0.3% in retention times
Analysis times for VOCs: <20 seconds
Analysis times for SVOCs: <60 seconds
Dynamic range: 105 depending on detector and injection times

Data Processing and Instrument Control

Note: computer system is integral and necessary component of the analysis system and includes the following features:

- Preferred system parameters
- Pentium based machine
- Windows 2000 or XP operating environment
- EZ Chrom software for dual columns data acquisition