

ATAS GL OPTIC 3 Injection System

Technical Specifications



General

- Dimensions: 43 cm × 15 cm × 43 cm (h × w × d)
- Weight: 11 kg
- Ambient temperature range: 10 - 40°C
- Ambient operating humidity: 5 - 90%
- Mains power: 100 ÷ 240 V AC, 50/60 Hz
- Power consumption: 80 VA
- Conforms to safety standards:
 - ▶ The European Low Voltage Directive (1973/23/EC)
 - ▶ The Electromagnetic Compatibility Directive (1989/336/EC)

Injector

- Full electronic pressure/flow control
- Maximum operating temperature: up to 600°C at a GC oven temperature of 35°C
- Cooling: air (down to 35°C), LCO₂ (down to -50°C), LN₂ (down to -180°C)
- Temperature ramp rates: 0.1 - 30 °C/sec, 0.1 °C increment. Instrument with up to 30 °C/sec ramp rate
- Up to nine temperature segments can be programmed including negative temperature ramp
- Compatible with Merlin Micro-Seal septum
- Compressed air for cooling: moisture and oil free air at a pressure of 500 kPa (80 PSI)

Electronic Gas Control

- Two Electronic Gas Control channels
- Full electronic control of column, split and septum purge flows
- Column Flow and Pressure control modes
- Pressure range: 2 - 100 psi
- Flow range: 6 - 300 ml/min He (main channel, all models), 6 - 100 ml/min He (auxiliary channel, OPTIC 3-D and DC only)
- Pressure sensors:
 - accuracy : $\pm 2\%$ full scale
 - repeatability: $\pm 0.2\%$ full scale
- Flow sensors:
 - accuracy : $\pm 2\%$ full scale
 - repeatability: $\pm 0.2\%$ of full scale
- Up to nine flow/pressure segments can be programmed
- He, N₂ or H₂ carrier gas at a maximum pressure of 100 psi (700 kPa)
- Solvent sensor in the split line

External Communication

- LAN
- RS-232 (115,200 baud max.)
- Seven auxiliary relay outputs (30V/500 mA max.)
- External 5 V and 24 V supply connections (250 mA max.)
- Remote start/stop to GC and autosampler
- Four auxiliary inputs

Evolution Workstation Control Software

- Real-time system status and parameter display
- Method definition and development
- Automatically generated optimisation sequences
- Direct control of the instrument
- System run log file
- Password protection with two access levels
- On-line help

Cryotrap - optional

- Operating temperature range: -150°C to +350°C
- Cooling: cold gas (N₂, He or dry air) produced by LN₂ heat exchanger
- Temperature ramp rates: 1.0 - 50°C/sec
- Low LN₂ consumption
- Compatible with any GC

Automated Liner Exchanger (LINEX) – optional

- LINEX-DMI option enables automated analysis of dirty liquid samples containing non-volatiles or solid-like suspended matrix
- LINEX-TD option enables automated analysis of gas and solid samples

a total analytical solution

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