Agilent 6890
Gas Chromatograph

Instrument Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>120 V (±5%), Max power consumption 2,250 VA, 20 Amp dedicated 220 V (±5%), Max power consumption 2,950 VA, 15 Amp dedicated (optional) Frequency range: 48 to 66 Hz. Other power configurations available</td>
</tr>
<tr>
<td>Heated zones</td>
<td>Independent heated zones, not including oven: six (two inlets, two detectors, and two auxiliary) Maximum operating temperatures for auxiliary zones: 400°C</td>
</tr>
<tr>
<td>Data communications</td>
<td>GPIB, RS-232-C, and two analog output channels (1 mV, 1 V, and 10 V output available) as standard INET interface optional</td>
</tr>
<tr>
<td>Environment</td>
<td>Storage extremes: –40° C, 65°C Recommended ambient temperature: 15 to 35°C Recommended ambient humidity: 5 to 95%</td>
</tr>
<tr>
<td>Weight</td>
<td>49 kg (108 lbs)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>(h x d x w) 50 x 54 x 58 cm (20 x 22 x 23 inches) with EPC inlets 50 x 54 x 68 cm (20 x 22 x 27 inches) with manual inlets</td>
</tr>
</tbody>
</table>

Column Oven Characteristics

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>28 × 31 × 16 cm</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>4°C above ambient to 450°C –80° C to 450°C – with LN2 cryo –55° C to 450°C – with CO2 cryo</td>
</tr>
<tr>
<td>Temperature setpoint</td>
<td>Resolution: 1°C Maximum rate: 120° C/min</td>
</tr>
<tr>
<td>Maximum run time</td>
<td>999.99 min</td>
</tr>
<tr>
<td>Ambient rejection</td>
<td>&lt;0.01° C per 1°C</td>
</tr>
</tbody>
</table>

The GenTech Difference

Why Buy New When You Don't Have To? Our refurbished instruments have been expertly restored to function at the Manufacturer’s original performance specifications. This is validated by internal testing done prior to release and test data is included with the instrument package. GenTech is a full service reseller, our knowledgeable engineers perform installations, repairs, training and application setup. The inventory in our 60,000 sq. foot facility is constantly changing with new shipments coming in daily. GenTech customers receive lifetime phone support for all instruments they purchase.
Inlets

- Maximum inlets installed: two
- All inlets include septum purge
- Inlets available:
  - Packed: electronic or manual pressure/flow, 400° C max
  - Split/splitless: electronic or manual pressure/flow, 400° C max, electronic entry of pressure or flow and split ratio with electronic version
  - Temperature-programmable cool on-column: electronic pressure/flow, 450° C max
  - Programmable temperature vaporizer, 450° C max
  - Volatiles interface, 400° C max
- For electronic inlets:
  - Pressure setting range: 0 to 100 psi
  - Total flow setting range: split/splitless, 0 to 200 mL/min nitrogen, 0 to 1000 mL/min hydrogen or helium
  - Packed: 0 to 100 mL/min
Detectors

- All detectors are available with electronic control of gases.
- All detectors except the μ-ECD are available with manual control of gases.
- All detectors (manual or electronic) include electronic on/off of all gases.
- Detectors available:
  - Flame ionization detector (FID) for packed or capillary columns
  - Thermal conductivity detector (TCD)
  - Electron capture detector (ECD)
  - Micro-cell electron capture detector (μ-ECD)
  - Nitrogen-phosphorus detector (NPD) for packed or capillary columns
  - Flame photometric detector (FPD), single or dual wavelength
  - Atomic emission detector (AED)
  - Mass selective detector (MSD).

Flame Ionization Detector (FID)

- 450°C maximum operating temperature
- Automatic flame ignition from the keypad or ChemStation
- Flame out detection
- MDL: <5 pg carbon/s as propane using nitrogen carrier and 0.29 mm jet
- Linear dynamic range: 107 (± 10%) with nitrogen carrier and 0.29 mm jet

Thermal Conductivity Detector (TCD)

- 400°C maximum operating temperature
- Single filament with microcell
- MDL: <400 pg propane/mL helium carrier (MDL may be affected by laboratory environment.)
- Linear dynamic range: 105 (± 5%)

Electron Capture Detector (ECD)

- Equipped with anode purge for contamination resistance
- 400°C maximum operating temperature
- Makeup gas types: argon/5% methane, nitrogen
- Radioactive source: 15 mCi 63Ni plated
- MDL: <0.04 pg/s lindane
- Dynamic range: >104 with lindane

Micro-Cell Electron Capture Detector (μ-ECD)

- Radioactive source: 15 mCi 63Ni plated

Flame Photometric Detector (FPD)

- Range: 103 (S), 104 (P)
- Selectivity: 105 to 1 gS/gC, 106 to 1 gP/gC