

# Hideen HPR-20 S1000

With 1000 amu mass range

# Introduction

The Hiden **HPR-20 S1000** gas analysis system is configured for continuous analysis of gases and vapours at pressures near atmosphere in standard form, alternative systems being offered for applications requiring direct sampling from higher pressures to 30 bar.

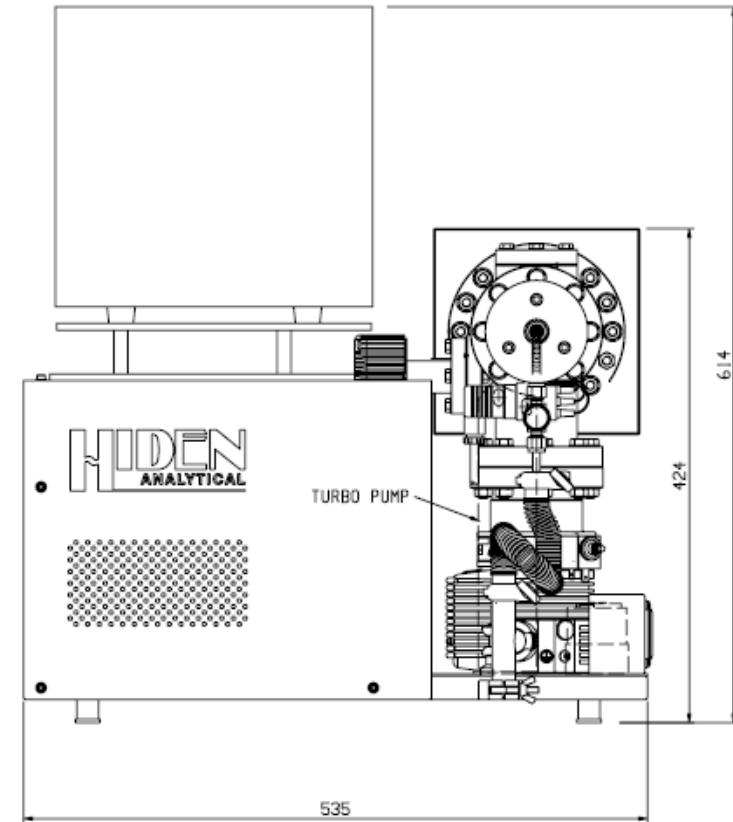
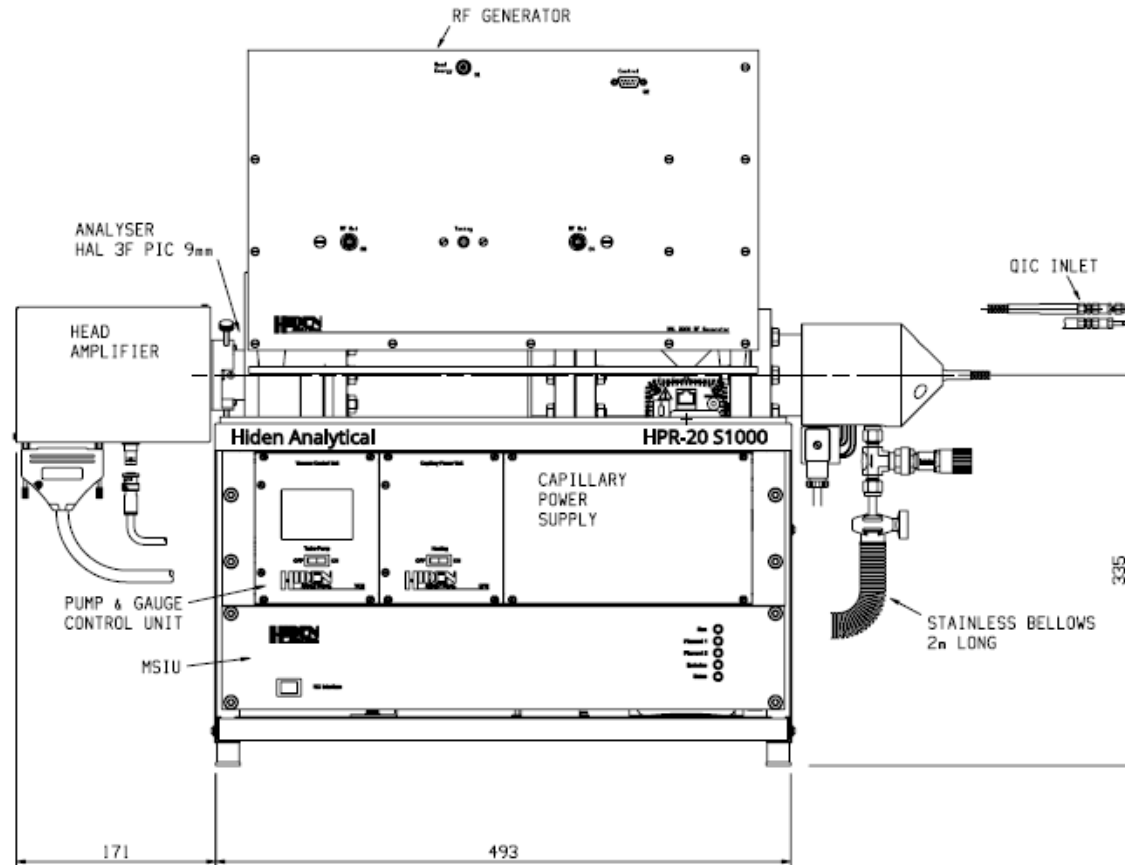
The Hiden QIC quartz-lined sampling interface operating at up to 200°C provides fast response times of less than 300 milliseconds for most common gases and vapours, including water vapour.

The standard HPR-20 S1000 system includes the Hiden 3F series 1000 amu mass range triple filter quadrupole mass spectrometer with dual Faraday and pulse ion counting electron multiplier detectors. Detection capability is to less than 5 part-per-billion.

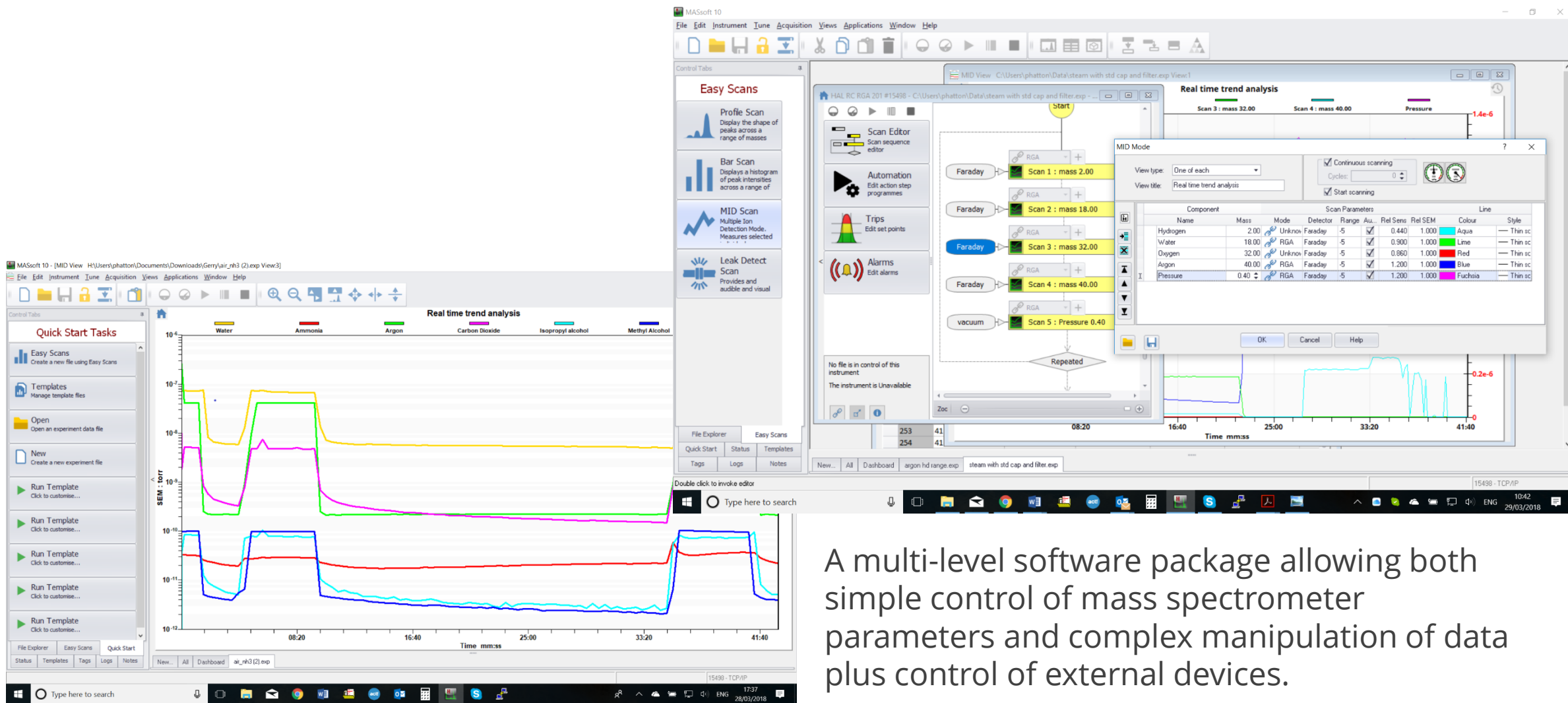
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# MASsoft Professional Control Software



A multi-level software package allowing both simple control of mass spectrometer parameters and complex manipulation of data plus control of external devices.

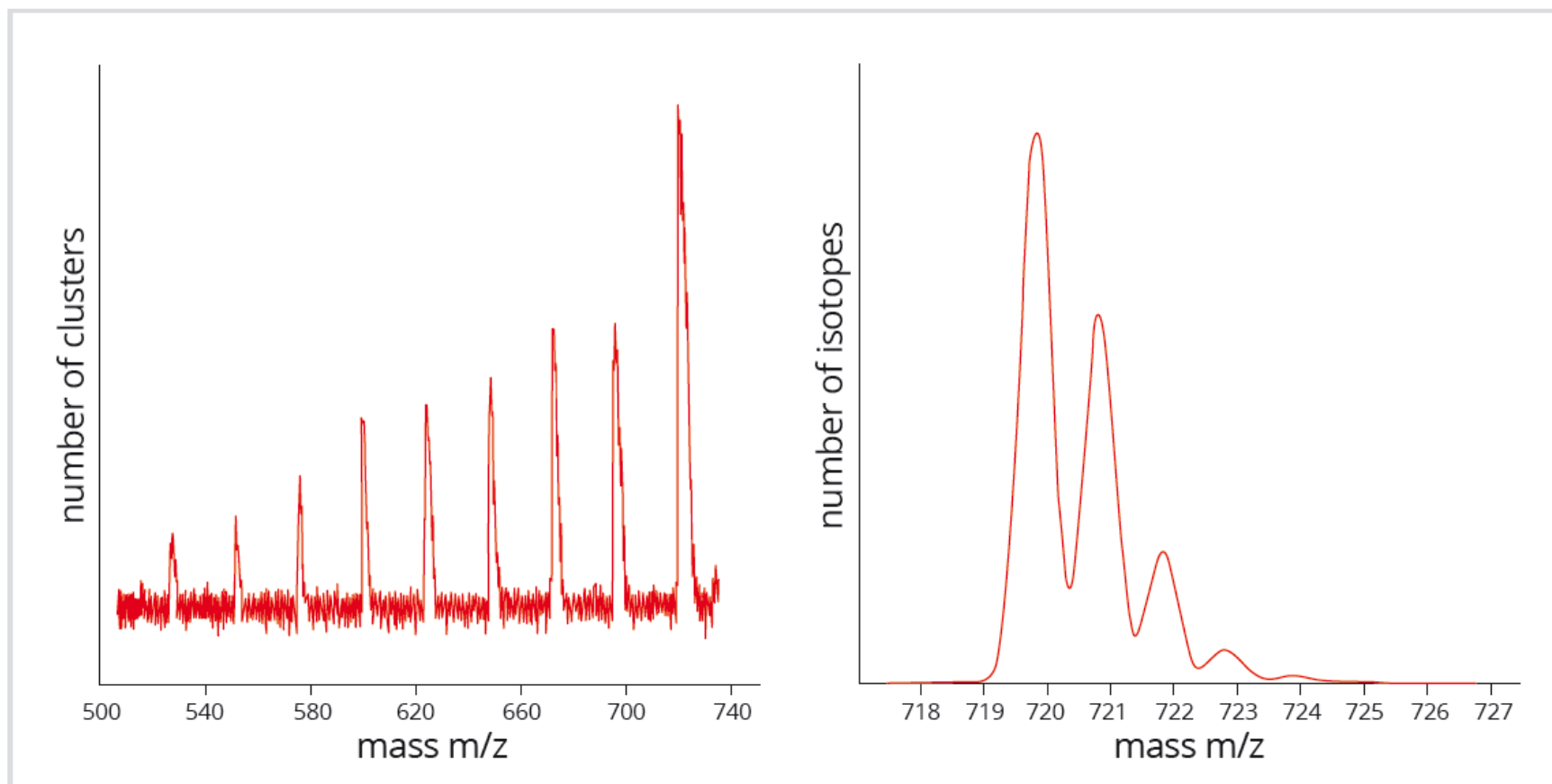
# Application Areas

- Thermal Analysis TA/MS
  - Catalysis
  - Fuel Cells
- CVD / MOCVD / ALCVD
- Environmental Monitoring
  - Glovebox Monitoring
- Gas Separation Studies

# Standard Features

- 7 decade continuous dynamic range.
- Fast scan speeds up to 650 measurements per second for transient analysis.
- Low dead volume, heated inlet for fast response to vapours.
- APSI-MS soft ionisation mode for suppression of spectral fragmentation providing simplified analysis of complex mixtures.
- Windows® MASsoft Professional PC software for data acquisition, data display and control of quadrupole parameters.
- Integration of external signals (temperature for example) simultaneously logged with mass spectrometer data. Two channels,  $\pm 10$  V user labelled and user scaleable in units of user choice are included.

# Example Data

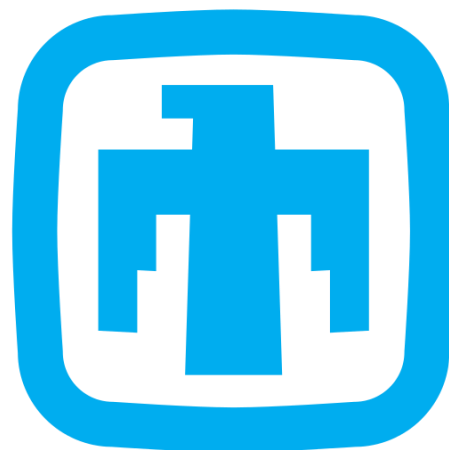


High mass transmission: Fullerene ( $C_{60}$ ) vapour isotope fragment analysis.



# Recent Customers

- Sandia National Laboratories
- CEA Liten – Atomic and Alternative Energies Commission
  - Anhui CNNC Tongyuan Technology Co. Ltd



**Sandia  
National  
Laboratories**

# Summary

- Wide mass range for analysis of specialist gases, vapours and desorbs products
- Larger quadrupole with high mass resolution and enhanced performance
- Compatible with Hiden's range of Gas Sampling inlets

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- [www.HidenAnalytical.com](http://www.HidenAnalytical.com)
  - The Hiden website is an excellent resource with product pages, brochures, catalogues, product pages with some application notes, presentation and other information.
  - Contact +44 1925 445225 for direct support.