

PS ANALYTICAL

PRODUCT SPECIFICATION

PSA 10.045 MILLENNIUM MERLIN ATOMIC ABSORPTION (AAS) SYSTEM

System Description

Automated atomic absorption spectrometer with integrated vapour generation for the determination of mercury to trace and ultra trace levels. Hollow cathode lamp excitation source with detection by Photodiode. Capable of operation with both continuous flow and discrete sample injection options. Suitable for both routine and research applications matching throughput with sensitivity requirements.

General

Gas Liquid Separator	Unique design with low foaming characteristics offering virtually zero carryover
Gas Supply	An inlet pressure of 30 - 60 psi is required. Flow rates pre-set to optimum levels with automatic shutdown under software control
Perma Pure™ Cassette	Perma Pure™ continuous moisture removal system in an interchangeable cassette
System Control	Full control with PSA's Millennium software running under MS Windows™
Data Connection	Built in USB interface
Computer Specification	The minimum specification of the PC needed to run the software is Intel Pentium processor, 64 MB RAM., 50 MB free HD space, SVGA graphics 800 x 600, 256 colours, Windows 95, 98, NT, 2000 or XP operating system

Sample Throughput and Analytical Performance

Limit of Detection	20 ppt (without pre-concentration)
Linear Dynamic Range	20 ppt to 100 ppb in continuous mode.
Sample Throughput	Up to 60 samples per hour
Autosampler	Up to 200 sample, random access. (4 versions available)
Power Requirements	Voltage 230V AC at 50 Hz or 120V AC at 60 Hz
Voltage Fluctuation	± 10%
Power	Total system, not including PC, 32 VA



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Operating Environment	-5°C to +40°C, further details available on request
Technical Standard	Compliant with the legal requirements of the Low Voltage directive 73/23/EEC and the EMC directive 89/336/EEC

The System is also Compliant with the Following Standards

Safety	Built to IEC 1010-1 (EN61010-1) Safety requirements for electrical equipment for measurement, control and laboratory use
EMC	EN50081-1 Generic emission, residential, commercial light industrial environment EN50082-1 Generic immunity, residential, commercial light industrial environment
Weight	Actual: 14 Kg Packed: 25 Kg including manuals/spares and consumables kit.
Dimensions	Actual: 460 H x 380 W x 350 D (mm) Packed: 750 H x 600 W x 500 D (mm)

Software

The PSA Millennium Software provides instrument control and data acquisition running under MS Windows™

Fully Multi-Tasking

Add a calibration, multiple samples and checks at the touch of a button
Set the system to automatically shut down at the end of a run
User definable results display
Set overrange criteria, such as automatically running a blank after a high sample
Export to LIMS software
Complete saving of all information about a particular sample
Keep a history of all modifications made to a particular method

As Standard the Millennium Merlin System Comprises

Millennium Merlin
Random Access Multiple Tray Autosampler
PSA Millennium Software
All interface cabling
Installation Kit
Consumables Kit (up to 6 months supply depending on use)
Users Manuals

Optional Items

Personal Computer Pentium based. (Full specification available on request)
Printer compatible with above PC
Atomic Fluorescence Detector

Note: Millennium Merlin is a PSA Tradename. MS Windows is a Microsoft Tradename



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