

# PS ANALYTICAL

## PRODUCT SPECIFICATION

### PSA 10.225 PSA ONLINE MERCURY SYSTEM



#### System Description

Online atomic fluorescence spectrometer with integrated sample digestion and vapour generator for the determination of mercury of trace and ultra-trace levels. Low-pressure Hg lamp excitation source with detection by Photo-multiplier. Capable of operation with both continuous flow and discrete sample injection options. Suitable for online operation 24 hours per day, matching throughput with sensitivity requirements.

#### General

Gas Liquid Separator	Unique design with low foaming characteristics offering virtually zero carryover.
Gas Supply	Inlet pressure 30 - 60 PSI. Flow rates pre-set to optimum levels with automatic shutdown under software control.
Moisture Removal	Perma Pure™ continuous moisture removal system.
System Control	Full control under PSA Online Process Control software.
Data Connection	Four 4-20mA and for digital outs for alarms as standard. Optional Modbus, RS232, Profibus, OPC and additional 4-20mA available
Computer Specification	Minimum: Intel ATOM 230, 2GB RAM with
Operating System	Windows Vista

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## Sample Throughput and Analytical Performance Utilizing AFS

Limit of Detection	<10 ppt
Linear Dynamic Range	1 ppt to 10 ppm
Sample Throughput	Typically 6 minutes per sample
Digestion Manifold	UV + Cooling as standard UV, UV + Heating, Heating only and UV only available as options
Power Requirements	Voltage 230V AC at 50 Hz or 120V AC at 60 Hz
Voltage Fluctuation	+ 10%
Power Total System (including PC)	500 VA
Operating Environment	5°C to +55°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	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: 72 Kg Packed: 100 Kg including manuals/spares and consumables kit.
Dimensions Actual	1100 H x 600 W x 373 D (mm)

## Optional Accessories

Atomic Absorption Module for Hg determinations to meet local regulations.

## Software

Process control software and data acquisition software running under Windows™ Vista  
User Login  
User definable access restrictions  
User definable alarms with actions  
Transfer of data via RS232, 4-20 mA, Voltage  
Export of results in ASCII format  
Full reporting capabilities  
Remote control via RS232, TCP/IP  
Visual diagnostics of instrument  
Maintenance scheduling and automatic method procedures  
Scheduled calibrations  
User definable START UP and CLOSE DOWN procedures  
Real time trending of results



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## **As Standard the Online Mercury System Comprises**

With touch-screen monitor PC  
Separate electronics and chemical sections  
Reagent containers  
Online process control software  
All interface cabling  
Installation kit  
User manuals

## **Optional Items**

Heater + UV + Cooling Assembly – L225L200  
Heater + Cooling Assembly – L225H100  
UV Only – L225L300  
Stand – L225S100  
Modbus (Input/Output) – S670P100  
Profibus (Output)  
OPC Server/Client (Input/Output) – C210S012/C210S0123  
Voltage output (Block of 4)  
Four 4-20mA and digital output (Block of 4)



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