SemiChem APM

Wallmount

Advantages

Increased tool throughput

Decreased chemical costs

Real time process monitoring

Insurance against batch loss

Improved cost of ownership

Applications

Copper CMP

Tungsten CMP

Wet-Etch

Cleans

DSP+

Nitride Etch

PAN Etch

Piranha Etch

HF



Global Measurement Technologies' SemiChem Advanced Process Monitor offers process engineers the accuracy, reliability and flexibility for a higher degree of efficiency and consistency to meet the demands for higher yield and zero defect tolerance. In the ultra-competitive microelectronics industry, the most advanced facilities can ill afford highly expensive processes without the use of sophisticated monitoring and control to ensure consistent wafer manufacturing.

Quantitative chemical concentration is obtained with the SemiChem. Full on-line chemical monitoring allows real time correction of bath composition and therefore stable control of the process conditions; product consistency is maintained.

Product yields are increased when a quantitative process composition is known. Variations that can affect product quality are immediately apparent and can be quickly correct before loss of product quality.



SemiChem APM

Specifications

Product Features

4 4...20mA Analog Outputs 8 Programmable relays Ethernet & RS232 Serial Color Touchscreen Single Measuring Cell Integrated Reagent Storage Single Sample Point 1 5ml Digital Burette Multiple Sensor Inputs

Product Options

Multiple Sample Points
Additional 5ml Digital Burettes
Additional Sensors
Safety Interlocks
Reagent Low Level Detection

Analysis Methods Potentiometry/Standard Addition/Photometry

Accuracy¹ +/- 0.2% of Displayed Value

Precision¹ +/- 0.2% Relative Error

Measurement Time Less than 5 minutes/

analysis (application dependent)

Calibration Interval at start-up²

Sample Consumption less than 5mls/analysis

Sample Size 0.05 to 5mls

(application dependent)

Sample Temperature up to 200°F (93°C)

Water Consumption less than 1000mls/analysis

Sample Inlet/Return less than 30psi 0.5 liter/minute

1/4" OD flare fitting

1" FPT containment coupling

Deionized Water 20-40psi

2.0 liters/minute 1/4" OD flare fitting

CDA 60-80psi

1/4" OD quick fitting

Process Drain 3/4" NPT gravity drain

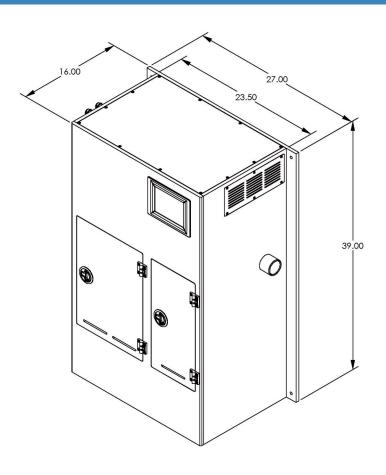
Cabinet Drain 1/2" NPT gravity drain

Power 110/220 VAC, 50/60Hz, 1/0.5A

field switchable

Exhaust 1 7/8" OD @ 17CFM

Overall Dimensions 39.00" H x 27.00" W x 16.00" D



^{1.} Refers to "hardware" only. External factors such as application, chemistry, and process conditions can affect system accuracy and precision.

2. This does not include collibration of the legacy. Please refer to the User's Guide for more information.

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