

# SemiChem APM 200, Single Cell Wall Mount

*Provides a lab quality measurement in a durable, reliable, online platform*

The SemiChem APM 200 (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.

Our SemiChem APM 200 allows quantitative chemical concentration. Full on-line chemical monitoring enables real-time correction of bath composition and therefore stable control of the process conditions; product consistency is maintained.

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

## Product Options

- Multiple sample points
- Additional 5 mL digital burettes
- Additional sensors
- Safety interlocks
- Reagent low level detection

## Advantages

- Increased tool throughput
- Decreased chemical costs
- Real-time process monitoring
- Insurance against batch loss
- Improved cost of ownership



*SemiChem APM 200, model 009340 samples, analyzes, and reports quantitative chemical concentration.*

## APPLICATIONS

- Copper CMP
- Tungsten CMP
- Wet etch
- Cleans
- DSP+
- Nitride etch
- PAN etch
- Piranha etch
- HF

## FEATURES

- Four, 4-20 mA analog outputs
- Eight programmable relays
- Ethernet and RS232 serial
- Color touchscreen
- Single measuring cell
- Integrated reagent storage
- Single sample point
- One, 5 mL digital burette
- Multiple sensor inputs

## SPECIFICATIONS

<b>Analysis Methods</b>	Potentiometry/standard addition/photometry
<b>Accuracy<sup>1</sup></b>	± 0.2% of displayed value
<b>Precision<sup>1</sup></b>	± 0.2% relative error
<b>Measurement Time</b>	Less than 5 minutes/analysis (application dependent)
<b>Calibration Interval</b>	At start-up <sup>2</sup>
<b>Sample Consumption</b>	Less than 5 mL/analysis
<b>Sample Size</b>	0.05 to 5 mL (application dependent)
<b>Sample Temperature</b>	Up to 93°C (200°F)
<b>Water Consumption</b>	Less than 1000 mL/analysis
<b>Sample Inlet/Return</b>	Less than 30 psi 0.5 liter/minute ¼" OD flare fitting 1" FPT containment coupling
<b>Deionized Water</b>	20 – 40 psi 2.0 liters/minute ¼" OD flare fitting
<b>CDA</b>	60 – 80 psi ¼" OD quick fitting
<b>Process Drain</b>	¾" NPT gravity drain
<b>Cabinet Drain</b>	½" NPT gravity drain
<b>Power</b>	110/220 VAC, 50/60 Hz, 1/0.5A field switchable
<b>Exhaust</b>	1 7/8" OD @ 17 CFM
<b>Overall Dimensions</b>	39.00" H x 27.00" W x 16.00" D

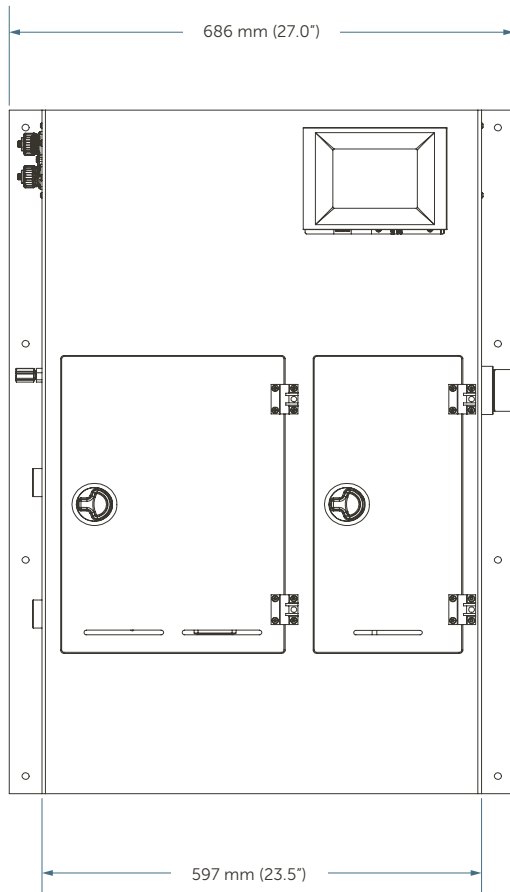
<sup>1</sup> Refers to "hardware" only. External factors such as application, chemistry, and process conditions can affect system accuracy and precision.

<sup>2</sup> This does not include calibration of pH sensor. Please refer to the Installation and Operating Manual for more information. Entegris believes the data contained herein is factual, and the opinions expressed are of qualified experts regarding the results of conducted tests, the data is not to be taken as warranty or representation that Entegris assumes legal responsibility. The data is offered solely for consideration, investigation, and verification. Any use of this data and information must be determined by the user to be in accordance with federal, state, and local laws and regulations. All specifications are subject to change without notice.

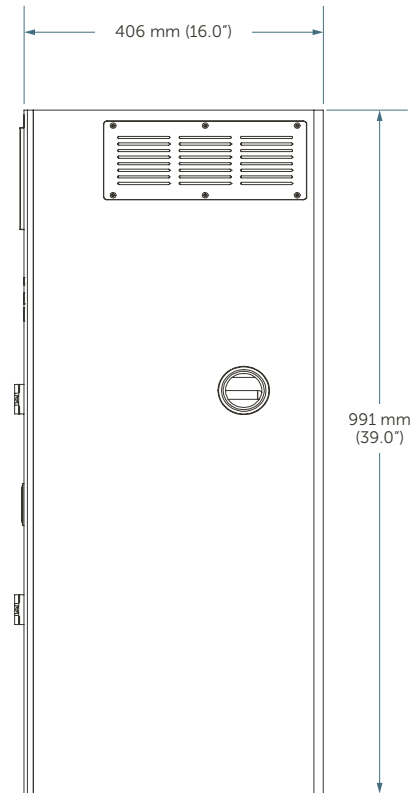
## DIMENSIONS

### SemiChem APM 200, Single Cell Wall Mount

Front View



Side View



### FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit [entegris.com](http://entegris.com) and select the [Contact Us](#) link to find the customer service center nearest you.

### TERMS AND CONDITIONS OF SALE

All purchases are subject to Entegris' Terms and Conditions of Sale. To view and print this information, visit [entegris.com](http://entegris.com) and select the [Terms & Conditions](#) link in the footer.



#### Corporate Headquarters

129 Concord Road  
Billerica, MA 01821  
USA

#### Customer Service

Tel +1 952 556 4181  
Fax +1 952 556 8022  
Toll Free 800 394 4083

Entegris®, the Entegris Rings Design®, and other product names are trademarks of Entegris, Inc. as listed on [entegris.com/trademarks](http://entegris.com/trademarks). All third-party product names, logos, and company names are trademarks or registered trademarks of their respective owners. Use of them does not imply any affiliation, sponsorship, or endorsement by the trademark owner.

©2021 Entegris, Inc. | All rights reserved. | Printed in the USA | 9000-11939ENT-1021