



# PA200PS Thermal Probe System

This guide contains information to help prepare your facility for the arrival of your PA200PS thermal system.

## Thermal System Requirements

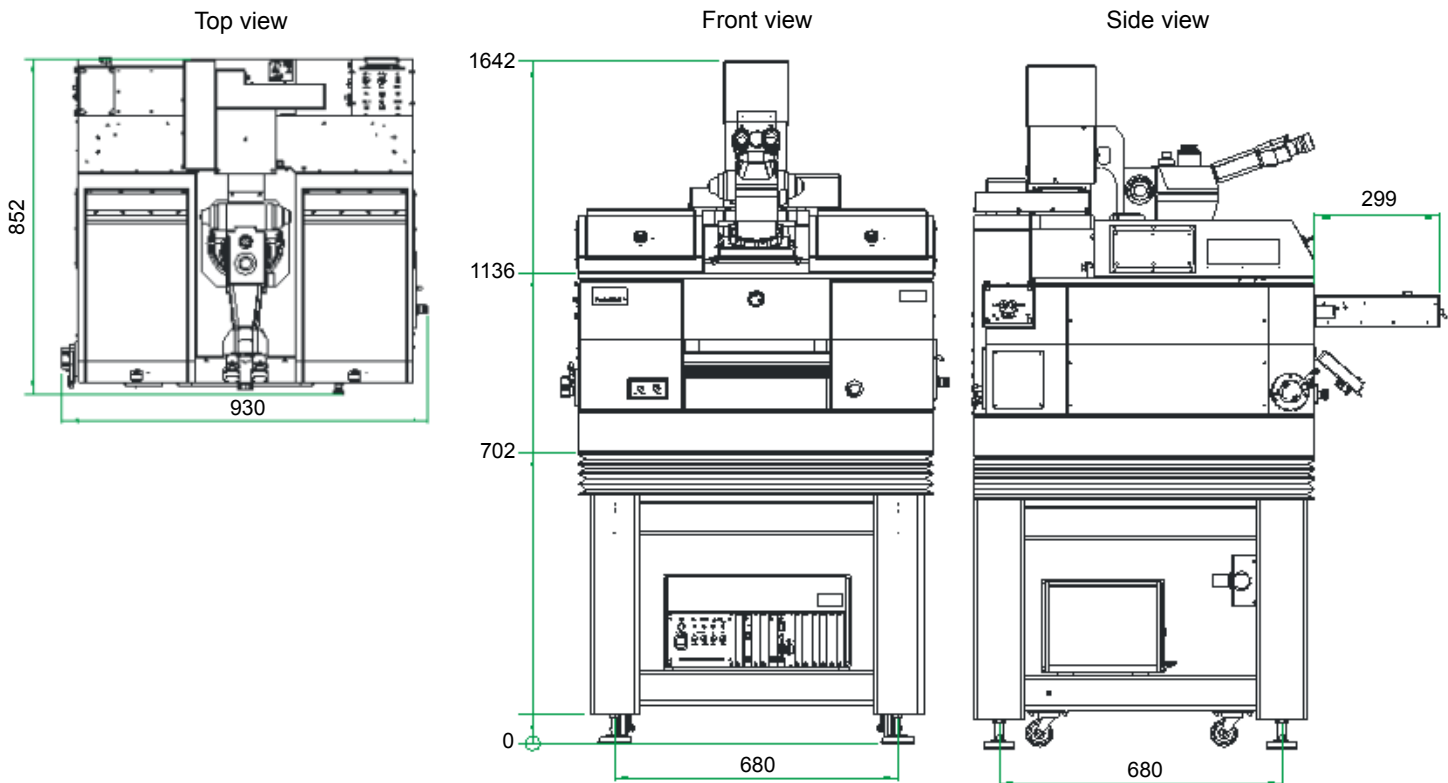
Air and Vacuum	Vacuum	<ul style="list-style-type: none"> <li>• Less than 200 mbar absolute</li> <li>• Flow rate insignificant</li> <li>• 8 mm hose</li> </ul>
	Compressed air for vibration isolation table	<ul style="list-style-type: none"> <li>• Filtered, dry and oil-free</li> <li>• Minimum 6 bar to 10 bar maximum</li> <li>• Flow rate insignificant</li> <li>• 8 mm hose</li> <li>• Can be a sideline from CDA</li> </ul>
	CDA for ATT thermal system— A200 series	<ul style="list-style-type: none"> <li>• Compressed air 6 (min) - 10 (max) bar</li> <li>• Air flow maximum 100 liters/min at SATP</li> <li>• Dew point temperature: <ul style="list-style-type: none"> <li>– A200 +15°C system = <math>\leq 5^{\circ}\text{C}</math></li> <li>– A200 -10°C system = <math>\leq -20^{\circ}\text{C}</math></li> </ul> </li> <li>• 8 mm hose</li> </ul>
	CDA for ATT thermal system—C200 series	<ul style="list-style-type: none"> <li>• Compressed air 6 (min) - 10 (max) bar</li> <li>• Air flow maximum 150 liters/min at SATP</li> <li>• Dew point temperature: <ul style="list-style-type: none"> <li>– C200 -40°C system = <math>\leq -50^{\circ}\text{C}</math></li> <li>– C200 -60°C system = <math>\leq -70^{\circ}\text{C}</math></li> </ul> </li> <li>• 8 mm hose</li> </ul>
	 <b>WARNING</b>	<p><i>FormFactor does not endorse or recommend using nitrogen instead of CDA for thermal system operation with any FormFactor system due to the risk of oxygen depletion in the working environment.</i></p> <p><i>If your testing configuration requires the use of nitrogen instead of CDA for MicroChamber purge, time in Quick Purge mode should be controlled. Discuss your setup with your safety and facilities departments to ensure that the oxygen flow in your working environment is adequate to dissipate any nitrogen build up. The use of oxygen sensor alarms is also recommended.</i></p>
Power	Station	<ul style="list-style-type: none"> <li>• 100–240 V AC nominal</li> <li>• 50/60 Hz</li> <li>• 1 phase</li> <li>• Maximum 1500 VA (including electronics control rack, computer, monitors and microscope)</li> </ul>
	Protection class	<ul style="list-style-type: none"> <li>• I (IEC 61140)</li> </ul>
	Transient overvoltage	<ul style="list-style-type: none"> <li>• Overvoltage category II (IEC 60364-4-443)</li> </ul>
	Main connector—North America	The station has an integrated socket strip (UL-498, CSA, with NEMA 5-15R receptacles) with grounded mains plug NEMA 5-15P, 15A / 125V.
	Main connector—Europe	The station has an integrated socket strip (with DIN 49440 sockets) with grounded mains plug CEE 7/7, DIN 49441, 16A/250V (German “Schuko”).
	Main connector—Asia	<p>The station has an integrated socket strip (with DIN 49440 sockets) with grounded mains plug CEE 7/7, DIN 49441, 16A/250V (German “Schuko”).</p> <p>A grounded mains plug NEMA 5-15P, 15A / 125V is provided in Japan and Taiwan. Contact a Cascade Microtech representative if these power line receptacles are not available in your facility.</p>
	Fuse for main connector	Ensure that a 16 A lead fuse is available in your facility power line where the proper main connector is plugged in.

# PA200PS Thermal Probe System

<b>Environmental Conditions</b>	Humidity	<ul style="list-style-type: none"> <li>• Tool area: 25% to 60%</li> <li>• Support equipment area: 25% to 60%</li> </ul>
	Temperature	<ul style="list-style-type: none"> <li>• Operating range: 19° C to 24° C</li> <li>• Target temperature: 22°C</li> </ul> <div>  <b>NOTE</b>            Keep electronics rack side ventilators and air expellers clear for air circulation.         </div>
	Pollution level	• 1 (IEC 60664)
	Clean room class	• Class 6 corresponding to DIN EN ISO 14644-1
	Tolerance	• 1K
	Vibrations	The facility should be free of vibrations caused by other equipment.
	<b>Other</b>	For information on other optional components, refer to the specific data sheet for that item.
<b>Dimensions</b>	Station + accessories	<ul style="list-style-type: none"> <li>• 930 mm ((W) x 852 mm (D) x 1642 mm (H) (with microscope in focus position, add 130 mm for z-lift)</li> <li>• Additional height added by optional accessories such as cameras and laser cutters can add up to a maximum of 900 mm.</li> </ul>
	Additional clearance	<div> <i>Front</i> <ul style="list-style-type: none"> <li>• 800 mm for operator/installation</li> </ul> </div> <div> <i>Back</i> <ul style="list-style-type: none"> <li>• 200 mm for cables</li> <li>• 800 mm during installation or service, or permanently when using optional holders for monitor, keyboard or test instrument</li> </ul> </div> <div> <i>Left</i> <ul style="list-style-type: none"> <li>• 200 mm for cables</li> <li>• 800 mm during installation or service, or permanently when using optional holders for monitor, keyboard or test instrument</li> </ul> </div> <div> <i>Right</i> <ul style="list-style-type: none"> <li>• 200 mm for cables</li> <li>• 800 mm during installation or service, or permanently when using optional holders for monitor, keyboard or test instrument</li> </ul> </div> <div> <i>Top</i> <ul style="list-style-type: none"> <li>• 900 mm</li> </ul> </div> <p>Depending on your system configuration, the thermal system controller may require an additional table. Additional room may also be required for thermal system cooling units.</p>
	Electronics rack	<ul style="list-style-type: none"> <li>• 450 mm (W) x 400 mm (D) x 230 mm (H), with connectors installed</li> <li>• Compatible with a 19 inch rack system, usually located on the inside shelf of the vibration isolation table. Alternate placement may require an additional table.</li> </ul>
	Joystick controller	<ul style="list-style-type: none"> <li>• 280 mm (W) x 250 mm (D) x 140 mm (H), with connector installed</li> <li>• Usually located on the optional joystick controller holder. Alternate placement may require an additional table.</li> </ul>
	<b>Weight</b>	<div>Station</div> <ul style="list-style-type: none"> <li>• Maximum 650 kg, actual weight depends on configuration</li> <li>• A forklift is required for moving and unpacking the station</li> </ul>
<b>Shipping Dimensions and Weight</b>	Station box	<ul style="list-style-type: none"> <li>• Dimensions: 1120 mm (W) x 1120 mm (D) x max. 2030 mm (H)</li> <li>• Weight: 780 kg, forklift required for unpacking</li> </ul>
	Accessories, 1 or 2 boxes	<ul style="list-style-type: none"> <li>• Dimensions: 800 mm (W) x 1200 mm (D) x max. 1400 mm (H)</li> <li>• Weight: approx. 230 kg each</li> </ul>

# PA200PS Thermal Probe System

## Dimensions (in mm)



© Copyright 2018 FormFactor, Inc. All rights reserved. No part of this document may be reproduced, transmitted or displayed in any form or by any means except as duly authorized by FormFactor, Inc. FormFactor and the FormFactor logo are trademarks of FormFactor, Inc. All other trademarks are the property of their respective owners.

### Important Notice

While the information contained herein is believed to be accurate as of the date hereof, no express or implied representations or warranties are made with respect to its accuracy or completeness. FormFactor, Inc., and its subsidiaries disclaim liability for any inaccuracies or omissions. All information is subject to change without notice.

Users are required to read and follow carefully all safety, compliance and use instructions. Users assume all loss and liability arising from the use of products in any manner not expressly authorized. The conditions and methods of use of products and information referred to herein are the entire responsibility of the user and, to the maximum extent permitted by applicable law, FormFactor, Inc., and its subsidiaries shall not be liable for any damages, losses, costs or expenses arising out of, or related to, the use thereof.

No license, express or implied, by estoppel or otherwise, under any intellectual property right is granted in connection herewith. Users shall take all actions required to avoid intellectual property infringement.

### Corporate Headquarters

7005 Southfront Road  
Livermore, CA 94551  
Phone: 925-290-4000  
[www.formfactor.com](http://www.formfactor.com)

