



LMS-91A Thermal Module System General Instructions

Introduction

The LMS-91A is a temperature controlled module system. The module can be mounted on a LMS-27 series probe station or used as a stand alone temperature controlled stage. The module has 4 ea. #4 clearance mounting holes on the base. There are also 4 ea. #4-40 threaded holes to mount the standard LMS-27 chucks. Standard or custom chucks from JmicroTechnology or customer developed can be mounted on the module. Vacuum is available from in the standard LMS-27 configuration. The LMS-91A system is comprised of three units, the Thermal Module(LMS-91A-M), the Temperature Controller(LMS-91A-TC), and the Water Cooler Assembly(LMS-91A-WC). Setup information is found on the pages following this introduction.

Performance

The Thermal Puck top side temperature can be controlled from approximately -7°C to +130°C. The actual chuck temperature range is dependant on the chuck thermal mass and heat/cold loading. Typical expected performance is summarized below.

| | Controller Reading/Time | Surface Temp Reading |
|-------|-------------------------|----------------------|
| Chuck | 25°C to -7°C / 5 min. | -5°C |
| | -7°C to 125°C / 4 min. | 123°C |
| | 125°C to 25°C / 3 min. | 25°C |

Other larger chucks may be used with reduced temperature