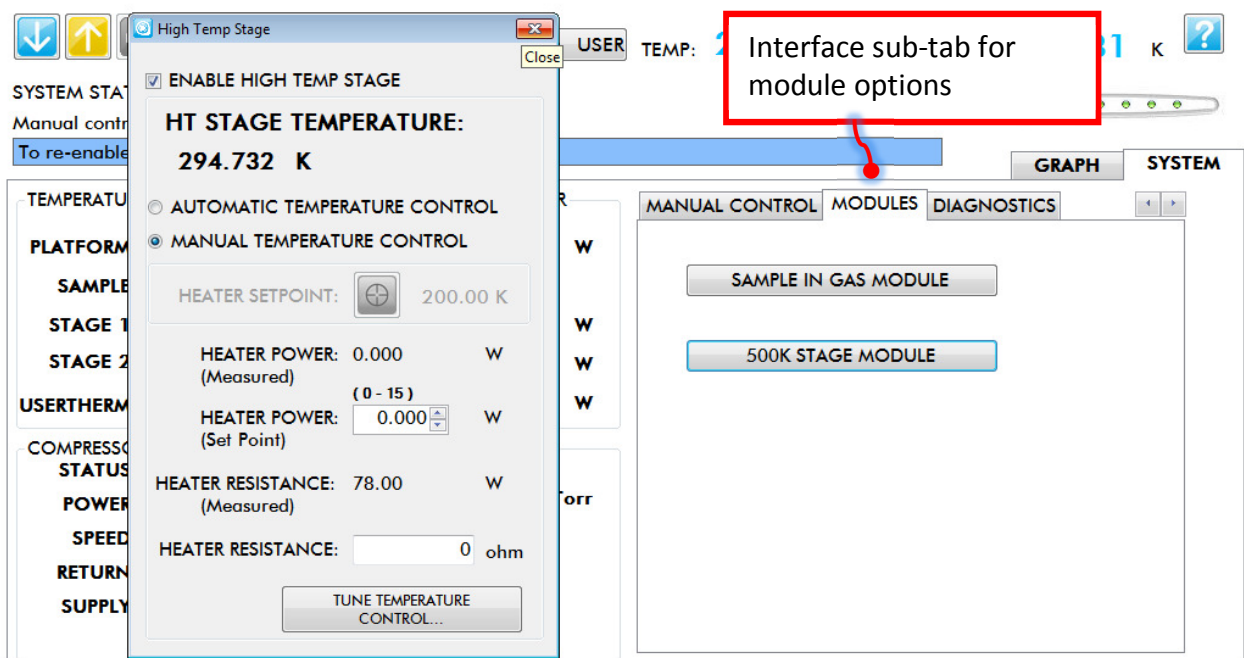


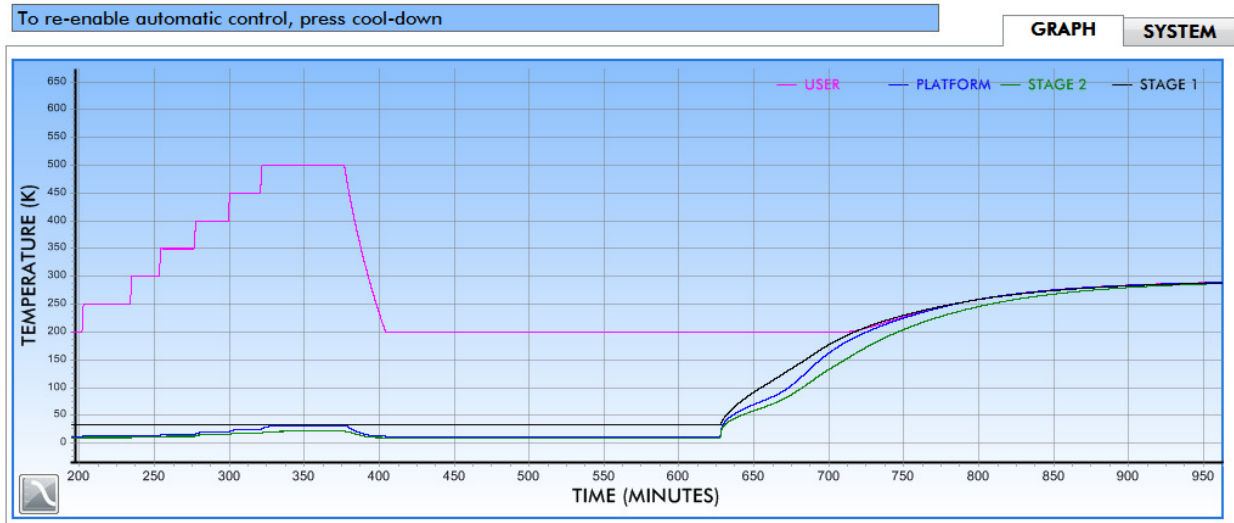
High Temperature Stage Option	Doc-122
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The high temperature stage is designed to extend the temperature range of the sample area to 500K. (higher temperatures are possible on request) The temperature may be controlled from 10K to 500K in one physical setup without exchanging parts. Note that this controls the sample temperature, while the platform and other parts of the system stay cold (below 50K) and the sample chamber vacuum is maintained.

The module has a setup dialog that allows the user to configure it for automatic or manual operation. In Automatic mode, a user thermometer is installed and the temperature is controlled about the target temperature. In Manual mode, the operator sets heater powers and observes the final sample temperature. See the interface dialog below.



As an example of operation, the system was first commanded to cool down, controlled to temperatures of 200, 250, ... 500K, and then allowed to warm up. The graph of the result is shown below.



If we zoom in on a section of the graph at 350K, we see an initial overshoot to 350.1K, followed by the temperature settling down to 350K, with a peak to peak variation of 0.008K.

