Almax·easyLab
science under pressure

Products

Diacell® PSU03 Power Supply

Diacell® PSU03 Programmable Power Supply

The Temperature Controller developed by Almax easyLab combines a programmable and interfaced power supply from Keithley and a proprietary temperature reader.

♦ Compatible with internal heaters of Diamond Anvil Cells (ring heaters, gasket heaters) with typical resistance < 2Ω (*);

♦ Possibility of using with other resistive heaters;

♦ Compatible with type K thermocouple sensor;

♦ Supplied with Labview® based software (Temperature Manager) for heater power and temperature control;

♦ Connection to a computer via USB cables;

♦ Supplied with all leads and connections.

(*) See HeliosDACs, uScopeDACs, LeverDACs, OmniDACs, One20DAC

RELATED PRODUCTS:

- Diacell® HeliosDAC
- Diacell® HeliosDAC-*Plus*
- Diacell® uScopeDAC HT series
- Diacell® OmniDAC
- Diacell® One20DAC

RELATED ACCESSORIES:

- Heater
- Ring heater
- Thermocouple

Technical Specifications:

Output Channel	1
Voltage Rating	0-30 V
Current Rating	0-36 A
Power	360 W
Supply Voltage	85VAC//265VAC
Temperature sensor	Type K
Resistive heater	< 5 Ω (ring or gasket heaters from Almax easyLab

Specifications subject to change without prior notice.
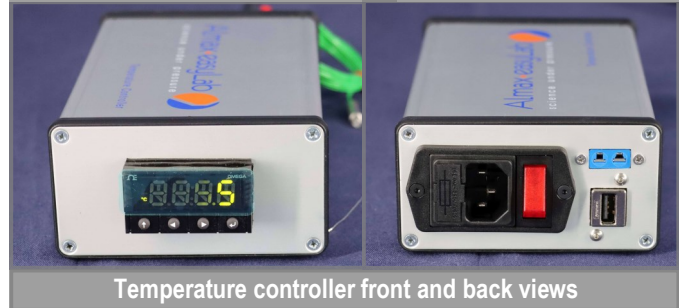easyLab and Diacell are registered trademarks of Almax easyLab

PSU03: Description

Power supply front and rear views

Temperature controller front and back views

PSU03: Heaters

The Diacell® PSU03 system has been developed to control the power (U,I) delivered to internal heaters of Diamond Anvil Cells.

Such internal **gasket heaters** of the uScopeDAC-HT(S), uScopeDAC-HT(G) and HeliosDAC-*Plus*.
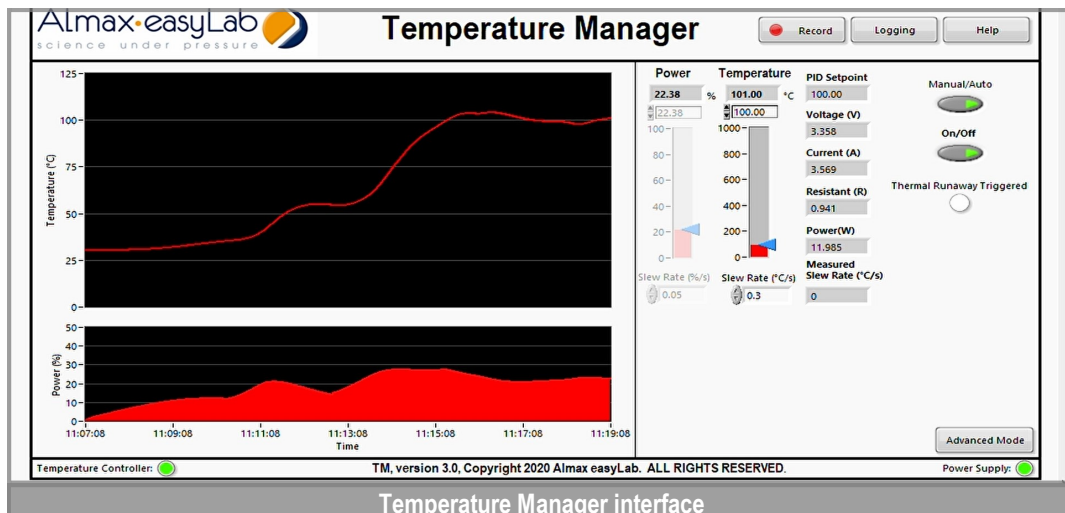
It can also be used for the simpler **ring heaters** that can be fitted in DACs like One20DAC, OmniDAC and LeverDACs.

Power supply and Temperature controller with an HeliosDAC

PSU03: Temperature Manager Labview® Software

♦ Almax easyLab provides a Labview® based Temperature Manager (TM) software in order to run high temperature experiments. The software is using the PID algorithm for accurate and optimized heater control. Integrated functions as the Slew Rate will automatically control the heating speed. The TM software includes a security function called Runaway function that will avoid temperature or power over-shooting.

♦ All the data can be recorded and exported for performing further data analysis.

Temperature Manager interface