



## ACS Material Equipment Series

### InSitu Pro™ AECH600S

- |      |                        |
|------|------------------------|
| I.   | Product Composition    |
| II.  | Product Features       |
| III. | Product Specifications |

**Contact Information:**

ACS Material, LLC

Address: 959 E Walnut St., Suite 100

Pasadena, CA 91106, USA

Phone: (866) 227-0656

Fax: (781) 518-0284

E-Mail: [contact@acsmaterial.com](mailto:contact@acsmaterial.com)

Revision: 122124

## I. Product Composition

### 1) Main Unit

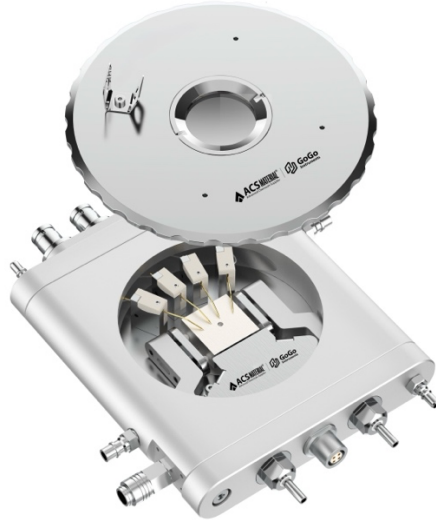


Photo of Electrical-Temperature Probing Stage

## II. Product Features

InSitu Pro™ AECH600S is a product designed for studying the temperature-dependent electrical performance of samples. It can characterize the changes in the electrical properties of samples with temperature.

The product uses liquid nitrogen cooling and resistive heating to achieve precise temperature control within the range of -190 to 600°C. It can be integrated with other optical equipment (such as bridge circuit, source meter (SMU), multimeter) for in-situ temperature-variable testing.

The product needs to be used with a temperature controller and an optional cooling controller. The accompanying temperature control software on the host computer facilitates temperature setting and data acquisition. The provided LabVIEW VIs/C# SDK allows customers to perform customized programming.

### III. Product Specifications

InSitu Pro™ Electrical-Temperature Probing Stage- AECH600S					
SKU#	EIPECH001				
Temperature Control Module	Cooling And Heating Method	Liquid nitrogen cooling, resistive heating	Structural Properties	Sample Stage Size	23x23mm *
	Temperature Control Range	-190 ~ 600°C *		Sample Stage Material	Silver *
	Temperature Stability	±0.1°C ( -190 ~ -120 °C: ±0.3°C)		Overall Dimensions	116x110x25mm *
	Temperature Resolution	0.1°C		Sample Chamber Height	6mm *
	Heating and Cooling Rate	0~30°C /min (Programmable point control or segmented control), up to 150°C/min		Chamber	Air-tight * Upgradeable vacuum
				Cooling the Casing	Circulating Water
	Temperature Control Method	PID	Electrical Properties (continued)	Probe	2x/4x Magnetic probe, manual control*
	Temperature Sensor	PT100		Probe Connector Type	BNC interfaces x 4 *
Optical Properties	Optical Path	Reflective optical path * (optional transmissive optical path)	Sample Table Potential	Default electrical suspension *, optional electrical grounding	
	Window Material	Quartz glass (manually removable and replaceable) *			
	Window Dimensions	Ø25mm *	Basic Configuration	1 main unit, 1 temperature controller, 1 cooling controller (low-temperature configuration), 1 liquid nitrogen tank (low-temperature configuration), 1 water circulation system, and 1 temperature control software.	
	Objective Working Distance	7mm *			

	Light Transmission Aperture	Default no light transmission * (optional with light transmission aperture)	Optional	Computer main unit / installation bracket / vacuum system / custom temperature control software.
	Window Defrosting	Airflow defrosting at sub-zero temperatures		
Note	All parameters above are default. Items marked with * are customizable.			

**Disclaimer:** ACS Material, LLC believes that the information in this Technical Data Sheet is accurate and represents the best and most current information available to us. ACS Material makes no representations or warranties either express or implied, regarding the suitability of the material for any purpose or the accuracy of the information contained within this document. Accordingly, ACS Material will not be responsible for damages resulting from use of or reliance upon this information.