

ACS Material Equipment Series InSitu ProTM AECHO600SA

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I. Product Composition

1) Main Unit



Photo of InSitu ProTM AECHO600SA

II. Product Features

The machine is a product designed for studying the variable temperature electrical properties of samples. It can characterize the changes in the electrical properties of samples with temperature variations. The product uses liquid nitrogen cooling and resistive heating to achieve precise temperature control within the range of -190 to 400°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 TM External Adjustment Probe Stage A- AECHO600SA								
SKU#	EIPOCHA1							
Temperature Control Module	Cooling And Heating Method	Liquid nitrogen cooling, resistive heating (Joule heating)	Structural Properties	Sample Stage Size	23x23mm *			
	Temperature Control Range	-190 ~ 400 °C *		Sample Stage Material	Silver *			
	Temperature Stability	±0.1°C (-190 ~ - 120 °C: ±0.3°C)		Overall Dimensions	430x430x60mm *			
	Temperature Resolution	0.1°C		Sample Chamber Height	15mm *			
	Heating and Cooling Rate	0~30°C /min (Programmable point control or segmented control), up to 150°C/min		Chamber	Vacuum*			
				XYZ Displaceme nt Range	±6mm			
	Temperature Control Method	PID		Probe Displaceme nt Accuracy	1μm			
	Temperature Sensor	PT100	Electrical Properties	Probe	Adjustable probes x4, manual control *			
Optical Properties	Optical Path	Reflective optical path * (optional transmissive optical path)		Probe Connector Type	BNC interfaces x 4 *			
	Window Material	Quartz glass (manually removable and replaceable) *		Sample Table Potential	Default electrical suspension *, optional electrical grounding			
	Window Dimensions	Ø25mm *	Basic Configuration	1 main machine, 1 temperature controller, 1 cooling controller				

	Objective Working Distance	16.5mm *		(low-temperature configuration), 1 liquid nitrogen tank (low-temperature configuration), 1 water circulation system, and 1 temperature control software.		
	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.					

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