



## ACS Material Equipment Series

### InSitu Pro™ ACH600S

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## I. Product Composition

### 1) Main Unit

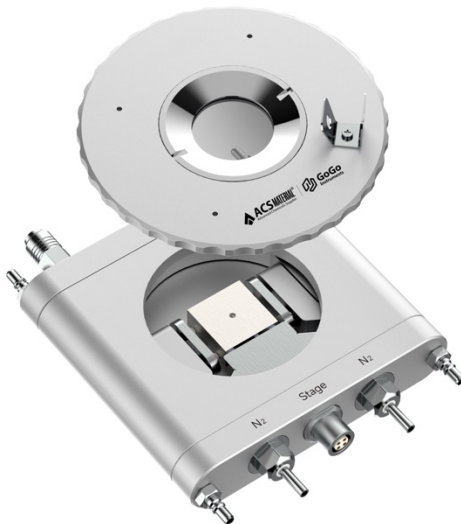


Photo of InSitu Pro™ ACH600S

### 2) Product Features

ACH600S is a product designed for studying the temperature-dependent optical performance of samples. It can characterize the changes in the optical 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 microscopes and Raman spectrometers) 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.

### 3) Product Specifications

InSitu Pro™ ACH600S					
SKU#	EIPCH001				
Temperature Control Module	Cooling and heating method	Liquid nitrogen cooling, resistive heating	Structural Properties	Sample stage size	20×20mm *
	Temperature control range	-190~600 °C*		Sample stage material	Silver *
	Temperature stability	±0.1°C (-190~-120 °C; ± 0.3°C)		Overall dimensions	91×97×24mm *
	Temperature resolution	0.1°C		Sample chamber height	4mm *
	Heating and cooling rate	0~30°C /min (Programmable, point control or segmented control), up to 150°C/min		Chamber	Airtight * (upgradeable to vacuum)
	Temperature control method	PID		Casing cooling	Circulating water
Optical Properties	Temperature sensor	PT100	Basic Configuration	Includes 1 main unit, 1 temperature controller, 1 cooling controller (low-temperature configuration), 1 liquid nitrogen tank (low-temperature configuration), 1 water circulation system, 1 temperature control software	
	Optical path	Transmission light path * (optional reflection light path)			
	Window material	Quartz glass (manually removable and replaceable) *			
	Window dimensions	Φ25mm *	Optional Configuration	Computer System / Installation Bracket / Vacuum System / Customized Temperature Control Software	
	Objective working distance	5mm *			
	Light transmission aperture	Default light transmission aperture * (optional without aperture)			
	Window defrosting	Airflow defrosting at sub-zero temperatures			
Remarks	All parameters above are default. Items marked with * are customizable. When upgraded to vacuum, the temperature control range is -190 to 400°C				

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