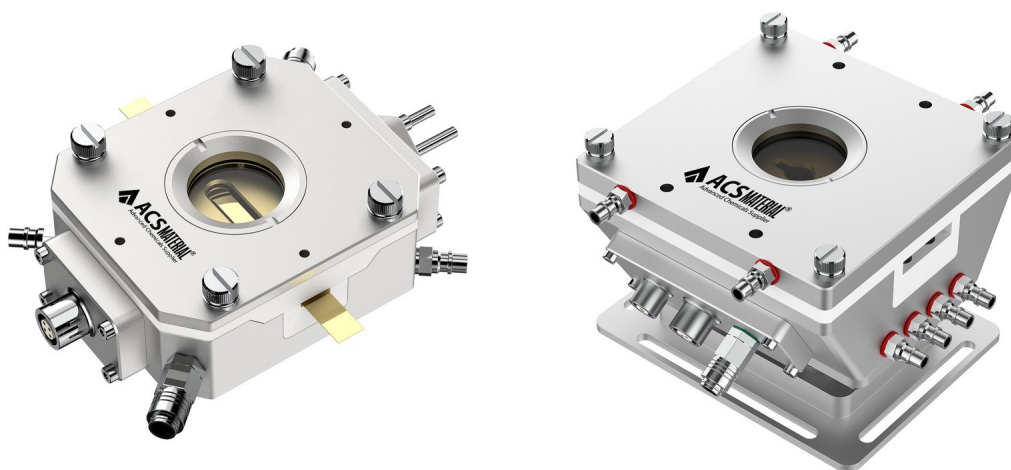


TECHNICAL DATA SHEET

UTM Module AUCH600 / AUCH600-HT

InSitu Pro[™] UTM heating & cooling modules · -190 to 600 °C · optional DIC / video extensometer · two sizes



AUCH600 / AUCH600-HT — heating & cooling modules for universal testing machines

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SECTION I

Product Description

InSitu Pro™ AUCH600 and AUCH600-HT are variable-temperature extension modules designed for universal testing machines (UTM) and other mechanical test systems: liquid-nitrogen cooling and resistive heating from -190 to 600 °C at ± 0.1 °C stability, with Max heating 100 °C/min and Max cooling 40 °C/min. Your test machine provides the loading and force measurement, while the module provides the sample temperature environment for in-situ stress-strain response and dynamic mechanical behavior characterization.

Both models carry a $\phi 25 \times 1$ mm top window in JGS2 quartz glass (220–2500 nm), hand-removable and replaceable, giving optical access to the sample during the test; DIC and video-extensometer equipment can be optionally configured for high-precision acquisition of strain data. The AUCH600 is a compact $96 \times 70 \times 30$ mm, 1 kg module with a copper 30×25 mm stage; the AUCH600-HT carries a larger copper 30×50 mm stage in a $160 \times 143 \times 83$ mm, 2 kg body.

The standard specification lists an atmosphere chamber on both models; any alternative chamber configuration and the mounting arrangement for your specific testing machine are confirmed at quotation.

SECTION II

Specifications

InSitu Pro™ UTM Heating & Cooling Module		
Model #	AUCH600	AUCH600-HT
SKU #	EIUCH600	EIUCH6HT
Heating / Cooling Method	Liquid-nitrogen cooling • resistive heating	
Temperature Range	-190 °C ~ 600 °C	-190 °C ~ 600 °C
Temperature Stability	± 0.1 °C	
Temperature Control Rate	Max heating 100 °C/min • Max cooling 40 °C/min	
Sample Stage	Copper • 30×25 mm	Copper • 30×50 mm
Top Window	$\phi 25 \times 1$ mm	$\phi 25 \times 1$ mm
Window Material	JGS2 quartz glass (220–2500 nm), manually removable and replaceable	JGS2 quartz glass (220–2500 nm), manually removable and replaceable
Chamber	Atmosphere	Atmosphere
Dimensions	$96 \times 70 \times 30$ mm	$160 \times 143 \times 83$ mm
Net Weight	1 kg	2 kg

SECTION III

Application Fields

- Variable-temperature testing on universal testing machines
- Low-temperature mechanical testing to -190 °C
- Dynamic mechanical behavior vs temperature
- Sample-environment control for mechanical test systems
- Stress-strain response vs temperature
- High-temperature mechanical testing to 600 °C
- Optical strain acquisition with DIC / video extensometer (optional)

SECTION IV

Configuration & Software

Basic configuration (per module): 1 × main unit (AUCH600 or AUCH600-HT), 1 × temperature controller, 1 × cooling controller, 1 × liquid-nitrogen tank (2 L), 1 × water-circulation system, 1 × temperature-control software, plus connection cables, tubing and accessories. Options include adapter plates, custom liquid-nitrogen tanks, custom water circulators, a vacuum system, host PCs, and custom temperature-control software. Final applicability and configuration are confirmed at quotation.

Temperature-control software is included in the standard configuration; available software functions and integration interfaces are confirmed at quotation. Both modules are supplied by quotation: request via the product page or the InSitu Pro™ Stage Selector at www.acsmaterial.com, and our engineers confirm the model, mounting, and configuration for your testing machine and reply with pricing and lead time.

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