



Brochure

# Thermal Transmittance Measurement Solutions

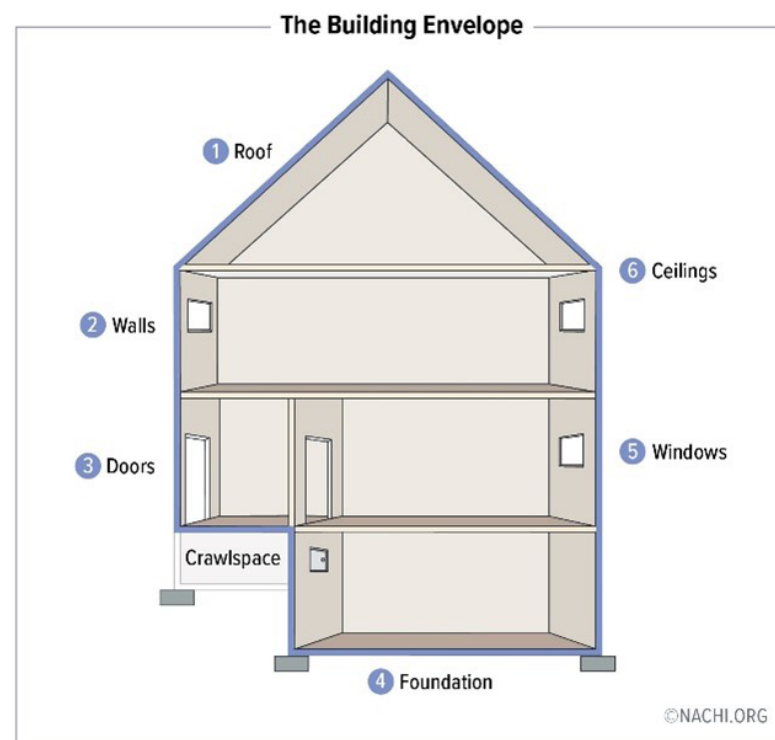
Swiss-patented ISO 9869 compliant  
measurement systems for U-Value (R-Value),  
temperature, and heat flux



# A precise way to measure your building's U-Value

Our building<sup>gt</sup> product series supports construction professionals in damage investigations, inspections, and renovation planning.

A cutting edge system designed for in-situ U-value measurement, the building<sup>gt</sup> series provides vital building calculations from values such as heat flux and temperature.

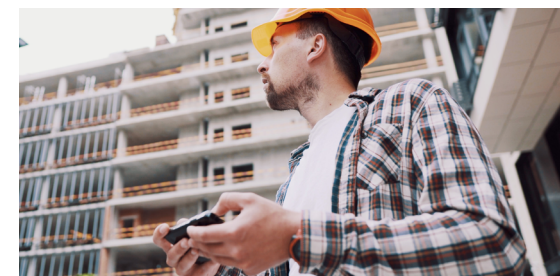


The building<sup>gt</sup> series consists of two U-Value measurement solutions, **UVAL Wired** and **UVAL Wireless**. These are **calibrated, plug-and-play** measurement kits that deliver reliable data, allowing **accurate** and **non-invasive assessment of thermal transmittance** in construction particularly for different building envelopes like walls, roofs, floors, and windows.

# Accurate & Non-Invasive In-Situ U-Value Measurement

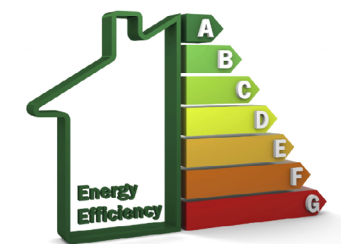
Traditionally, assessing a building's energy efficiency requires invasive methods like dismantling walls or relying on inaccurate assumptions and estimates.

The building<sup>gt</sup> series offers a **non-invasive, accurate solution for evaluating thermal efficiency**, giving users a clear and reliable assessment of their building's performance.



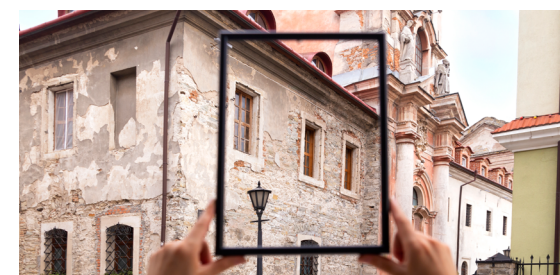
## Assessing the Status Quo

Designed to measure U-value with precision, ensuring compliance with regulatory standards



## Building Energy Rating

Obtain quantitative values to complement energy assessment methodologies and ensure full transparency



## Retrofitting Evaluation

Accurate U-value assessments empower informed decisions on renovation



## Measuring Novel Materials

Ideal for R&D and quality control purposes, ensuring precise assessment of innovative materials

# Available in Both Wired and Wireless Configurations

Experience flexibility in connectivity options with our product, available in both wired and wireless configurations. Whether you prioritize the affordability of a wired connection or the convenience of wireless technology, we have a solution to suit your needs.



Wired Kit



Wireless Kit

- ✓ **ISO-Conforming**  
All devices take measurements according to ISO 9869.
- ✚ **Swiss-Patented**  
Our Swiss, cutting-edge solutions are trusted by researchers and industries around the world.
- ▷ **Plug & Play**  
Sensor calibration data already loaded onto logger for fast plug-and-play measurements.
- 🔑 **Reliable & Precise**  
Our kits enable accurate thermal measurements and efficiency assessments
- ⊘ **Non-Invasive**  
Our solution delivers thermal measurements without intrusive methods like drilling or dismantling, ensuring minimal disruption.

	Wired	Wireless
Product Name	UVAL Wired System	UVAL Wireless System
ISO 9869 Measurements	✓	✓
Swiss-Patented gSKIN Heat Flux sensing Technology	✓	✓
Remote Measurement Access	✗	✓
Software with CSV Export Function	✓	✓
R-Value (thermal conductivity) also obtainable	Must be calculated manually	✓
Multiple Measuring Points Capability	Only 1 U-Value Measuring Point per system	Up to 5 U-Value Measuring Points per system
Other Features		<div>- IP67 Rated Node</div> <div>- Wireless Indoor Range of 50m</div>
Inclusions	<div><b>Device:</b></div> <div>1 gSKIN® Heat Flux Sensor</div> <div>1 gSKIN® DLOG Data Logger with 2 temperature sensors</div> <div><b>Accessories:</b></div> <div>1 USB cable (PC to data logger)</div> <div>1 Roll of Double-Sided Adhesive Tape</div> <div>Instructions and Manual:</div> <div>1 Calibration sheet</div> <div>1 Instruction manual</div>	<div><b>Device:</b></div> <div>Base Station</div> <div>Nodes (may order more)</div> <div>1 Inner Wall Heat Flux Sensor</div> <div>1 Outer Wall Surface Sensor</div> <div>2 Ambient Temperature Sensors</div> <div><b>Accessories:</b></div> <div>2 Ambient Sensor Mounting Clips</div> <div>1 Roll of Double-Sided Adhesive Tape</div> <div>1 Bag of Double-Sided Adhesive Water Repellent Strips</div> <div>1 Pair of Scissors</div> <div><b>Instructions and Manual:</b></div> <div>1 Calibration sheet</div> <div>1 Instruction manual</div>
Geographic Coverage	Worldwide	Available in Europe, most of Africa and the Middle East. Employs a sub-GHz Communication link at 868 MHz.
Price	CHF 1,949.00	CHF 2,399.00 for 1 measurement point, additional cost for more points.

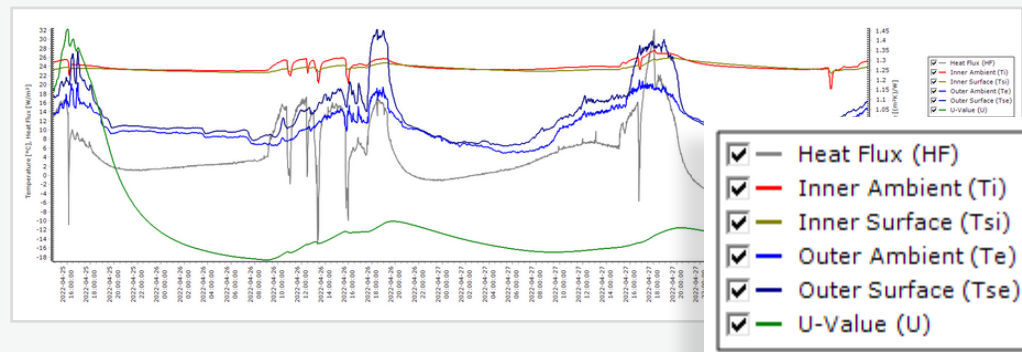


# About the software

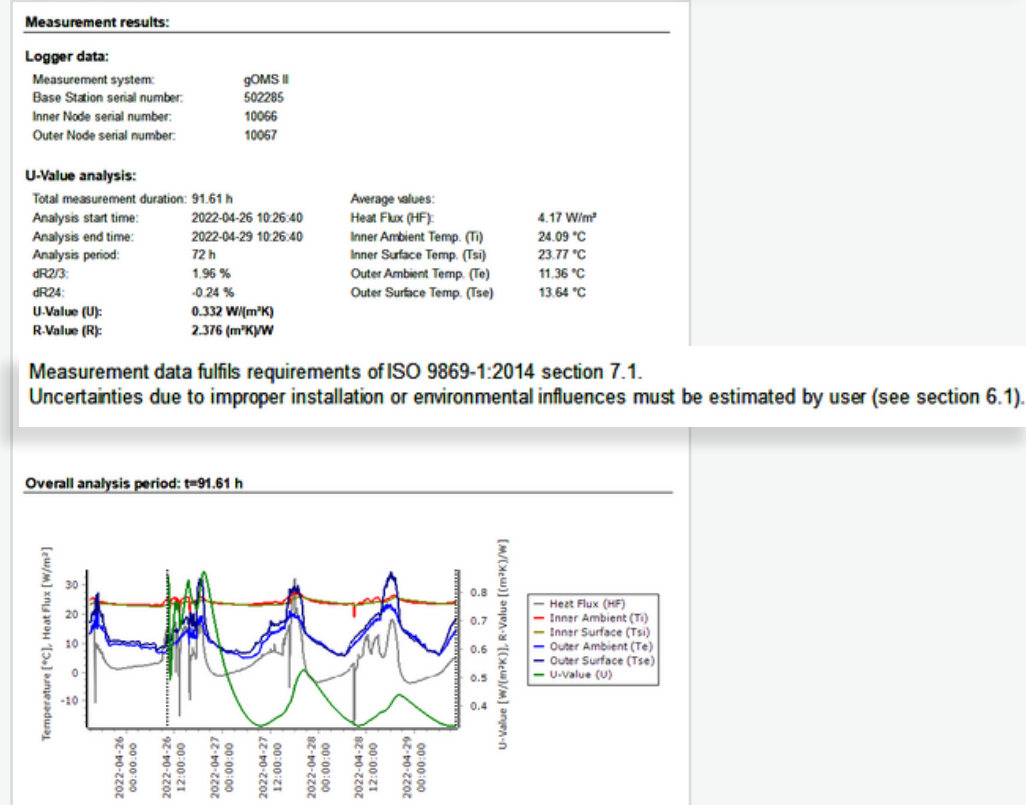
greenteg's analysis software, compatible with both wired and wireless kits, empowers users with a comprehensive suite of features.

- > Real-time analysis
- > CSV Export
- > Report generation
- > ISO 9869:1 Conformity Indication

Software graph:



Final U-Value display with ISO Verification



# Our clients

Our clients come from diverse roles within the building construction industry, spanning engineers, researchers, and environmental consultants.

Here are some of our esteemed clients:

**ETH zürich**

**KIER 한국에너지기술연구원**  
KOREA INSTITUTE OF ENERGY RESEARCH



**POLITECNICO**  
MILANO 1863

**ATKINS**  
Member of the SNC-Lavalin Group



**BURO HAPPOLD**



**greenteg**

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