### gOMS II Application Note



- Accurate U-Value and R-Value Measurements
- Wireless measurement set-up
- 5 Measurement Points at Once
- Quick and Easy Installation
- Measurement of Surface, Room and Outdoor Temperatures
- ISO 9869 and ASTM 31046/C1155 verifying software



greenTEG has developed a second generation wireless measurement solution that is capable of scaling to 5 U-Value measurement points.

## WHY OBTAIN THE U-VALUE?

The U-value is the most important parameter to determine the energy demand of a building. With greenTEG's gOMS II system, it is possible to measure the U-value accurately and easily.

greenTEG is the leading provider of U-value measurement solutions to quantify the insulation quality of buildings.

### greenTEG AG

Hofwisenstrasse 50a 8153 Rümlang, Switzerland Tel: +41 44 515 09 15

info@greenTEG.com greenTEG.com

# How is the U-Value Measured?

Two measurement nodes are needed for each U-value measurement. Node Type 1 is placed inside the building and measures the room temperature (Tin), the heat flux through the wall (q), and the wall's inside surface temperature. Node type 2 is placed outside the building and measures the outside temperature (Tout), and the wall's outside surface temperature.

The U-value is calculated as the arithmetic mean of all measured data points during the entire measurement period:

### U = q/(Tin - Tout)

Typical Users: Energy Consultants Architects Building Physics Engineers Insulation Manufacturers Property Appraisers Researchers



## **System Specifications:**

Application:	Required Type 1 Nodes:	Required Type 2 Nodes:	Node Type:	Contents:
U-Value Assessment:	1 - (Inside)	1- (Outside)	Inner Node	<ul> <li>1 x Combined Heat Flux and Surface Temperature Sensor</li> <li>1 x Ambient Air Temperature Sensor</li> </ul>
R-Value Assessment:	1 - (Inside)	1 - (Inside)	Outer Node	<ul> <li>1 x Surface Temperature Sensor</li> <li>1 x Ambient Air Temperature Sensor</li> </ul>

#### greenTEG AG

Hofwisenstrasse 50a 8153 Rümlang, Switzerland Tel: +41 44 515 09 15

info@greenTEG.com greenTEG.com