

Janitza electronics GmbH • Postfach 45 • D-35631 Lahnau-Waldgirmes

To Whom it may concern

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Our reference:	Confirmation
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Confirmation UMG Meters and Analyzers Calibration

Dear Ladies and Gentlemen,

We, Janitza electronics GmbH, with business address "Vor dem Polstück 1, 35633 Lahnau, Germany" do hereby confirm that Janitza electronics GmbH as the original manufacturer and supplier of UMG devices, have designed, manufactured and tested the UMG Power Analyzers along and in line with international EN and IEC standards.

UMG measuring devices are thoroughly designed by our engineers in order to provide long lasting products. Only well proved high quality components are used. Extensive test cycles during and after development confirm long service life.

Typical life time expectations for our UMG devices are 15 years. The individual life time of our UMG devices depends on the application conditions and stress parameters, such as ambient temperatures, transient voltages, harmonics ...

Janitza UMG devices are along and in line with the following standard:

- IEC 61557-12
- IEC 62052-11
- EN 52023-21
- DIN EN 61326 (2002-03)
- EN 61010-1 (2002-08)
- EN61010-1 08:2002
- IEC 61010-1:2001

Requirements of electromagnetical compatibility

: DIN EN61326:2002-03

Noise emmission

Basic unit : DIN EN61326:2002-03, table 4 class B, (residential areas)
Basic unit with option 1 : DIN EN61326:2002-03, table 4 class B, (residential areas)
Basic unit with option 2 : DIN EN61326:2002-03, table 4 class A, (industrial areas)

Noise Immunity (Industrial areas)

Casing : Electrostatic discharge immunity test, IEC61000-4-2 (4kV/8kV)
: Electromagnetically fields, IEC61000-4-3 (10V/m)
Voltage and supply : Voltage dips, IEC61000-4-11 (0,5Periode)
: Electrical fast transient/burst, IEC61000-4-4 (2kV)
: Surge immunity test, IEC61000-4-5 (1kV)
: Immunity to conducted disturbances, IEC61000-4-6 (3V)
Input/output, serial interfaces : Electrical fast transient/burst, IEC61000-4-4 (1kV)
: Surge immunity test, IEC61000-4-5 (1kV)

UMG devices follows in both, measurement method & measurement accuracy, the standards and are fully in line with it.

The 100 % end tests (calibration, function, safety) of each and every unit ensures that only high quality products are shipped out of the factory. The calibration made during end test before shipping to the customer, is verifying the device under test during this time at test. Our experience shows that the accuracy drift over time for UMG devices is very minor, the tolerance drift over the years, even after 10 years and more is very, very minor. With modern electronics, with quality components and a proper design there is basically no aging effect in terms of accuracy. It might be considered, considering the before mentioned, that the calibration is valid for a time period of 5 years.

This is also to guarantee that we are extending our full support pertaining to the use of all Janitza Products.

Very truly yours,

Rudolf Mueller
Director Sales & Marketing Export
Janitza electronics GmbH