# **EU Declaration of Conformity**

We Thurlby Thandar Instruments Ltd

Glebe Road Huntingdon

Cambridgeshire PE29 7DR

England

declare that the product

## TG1000 or TG2000 DDS Function Generator

is in conformity with the relevant Union harmonisation legislation; in particular, it meets the intent of the EMC Directive 2014/30/EU and the Low Voltage Directive 2014/35/EU. Compliance was demonstrated by conformance to the following harmonised standards which have been listed in the Official Journal of the European Communities.

## **EMC**

Emissions: a) EN61326-1 (2013) Radiated, Class B

b) EN61326-1 (2013) Conducted, Class B

c) EN61326-1 (2013) Harmonics, referring to EN61000-3-2 (2006)

Immunity: EN61326-1 (2013) Immunity Table 1, referring to:

a) EN61000-4-2 (2009) Electrostatic Discharge

b) EN61000-4-3 (2006) Electromagnetic Field

c) EN61000-4-11 (2004) Voltage Interrupt

d) EN61000-4-4 (2012) Fast Transient

e) EN61000-4-5 (2006) Surge

f) EN61000-4-6 (2009) Conducted RF

## Safety

EN61010-1 Installation Category II, Pollution Degree 2.

This declaration of conformity is issued under the sole responsibility of the manufacturer. Signed for and on behalf of Thurlby Thandar Instruments Ltd.

IAN HARMAN TECHNICAL DIRECTOR

Lan Harman

TTi Ltd, Huntingdon, UK 2<sup>nd</sup> February 2017

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This instrument has been designed to meet the requirements of the EMC Directive 2014/30/EU. Compliance was demonstrated by meeting the test limits of the following standards:

#### **Emissions**

EN61326-1 (2013) EMC product standard for Electrical Equipment for Measurement, Control and Laboratory Use. Test limits used were:

a) Radiated: Class B

b) Conducted: Class B

c) Harmonics: EN61000-3-2 (2006) Class A; the instrument is Class A by product category.

# **Immunity**

EN61326-1 (2013) EMC product standard for Electrical Equipment for Measurement, Control and Laboratory Use.

Test methods, limits and performance achieved are shown below (requirement shown in brackets):

- a) EN61000-4-2 (2009) Electrostatic Discharge: 8kV air, 4kV contact, Performance A (B).
- b) EN61000-4-3 (2006) Electromagnetic Field: 3V/m, 80% AM at 1kHz, 80MHz 1GHz: Performance A (A) and 1.4GHz to 2GHz: Performance A (A); 1V/m, 2.0GHz to 2.7GHz: Performance A (A).
- c) EN61000-4-11 (2004) Voltage Interrupt: ½ cycle and 1 cycle, 0%: Performance A (B); 25 cycles, 70%: Performance A (C); 250 cycles, 0%: Performance B (C).
- d) EN61000-4-4 (2012) Fast Transient, 1kV peak (AC line only; assumes signal connections <3m, therefore not tested), Performance A (B).
- e) EN61000-4-5 (2006) Surge, 0.5kV (line to line), 1kV (line to ground), Performance A (B).
- f) EN61000-4-6 (2009) Conducted RF, 3V, 80% AM at 1kHz (AC line only; assumes signal connections <3m, therefore not tested), Performance A (A).

According to EN61326 the definitions of performance criteria are:

Performance criterion A: 'During test normal performance within the specification limits.'

**Performance criterion B:** 'During test, temporary degradation, or loss of function or performance which is self-recovering'.

**Performance criterion C:** 'During test, temporary degradation, or loss of function or performance which requires operator intervention or system reset occurs.'

#### **Cautions**

To ensure continued compliance with the EMC directive the following precautions should be observed:

- a) connect the generator to other equipment using only high quality, double-screened cables. For the purposes of EMC testing it is assumed that signal connections from the instrument will be <3m and therefore immunity tests for signal lines (Fast Transient and Conducted RF) have been omitted.
- after opening the case for any reason ensure that all signal and ground connections are remade correctly before replacing the cover. Always ensure all case screws are correctly refitted and tightened.
- c) In the event of part replacement becoming necessary, only use components of an identical type, see the Service Manual.