
Certificate of Calibration

Certificate number: TC-1762-2

Applicant Name: **AV-Consulting Raadgevende Ingenieurs**
 Address : **Benedenberg 100/A**
 2861 LH Bergambacht

Transducer Manufacturer : **Visong Test**
 Model: **16500**
 Serial number: **00066** **Direction: Y**
 Description **Isotron Triax Accelerometer**
 Customer ID nr.: .

Preamplifier Manufacturer : **AuroVibe**
 Model: **AuroVibe**
 Serial number: **1**
 Description **Vibrations measuring system**
 Customer ID nr.: .

Calibration method:

This calibration was performed in accordance with the requirement specified in manufacturer specifications and SONOR Kalibratie procedure related to ISO 16063-21

Uncertainties:

The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor $k=2$, which provides a confidence level of approximately 95%. The standard uncertainty has been determined in accordance with EA 04/2.

Traceability:

The measurements have been executed using standards traceable to (inter)national standards. Supporting documentation relative to traceability is on file and is available on request.

Environmental conditions:

Air pressure 1022 hPa
Temperature 23 °C
Relative humidity 57 %

Date of Receipt: 31 October 2014
Date of Calibration : 31 October 2014
Date of Certificate : 31 October 2014

Authorized Signatory : F. Salama

1. Inspection

Results	Accelerometer	Ok
	Connector	Ok
	Cable	Ok

2. Sensitivity Y Axis

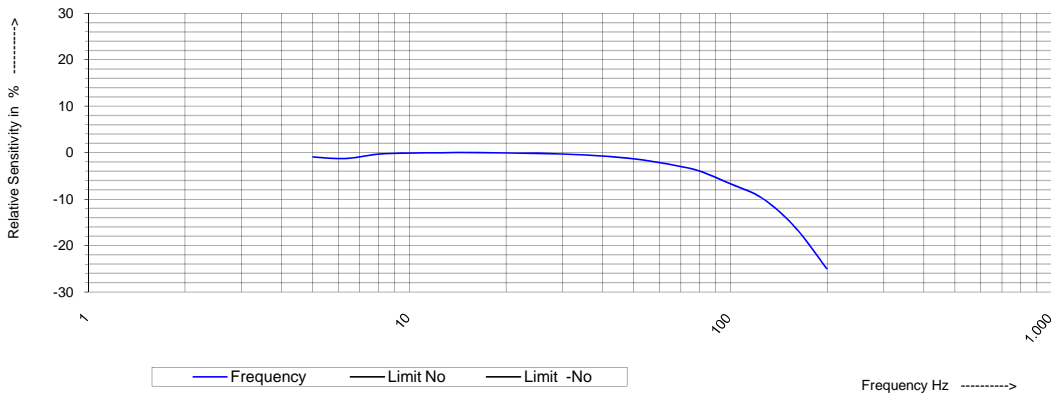
Expected	Unit	Measured
46,00	mV/m/s ²	46,01
451,11	mV/g	451,20

With $g = 9,80665 \text{ m/s}^2$
 Measurement uncertainty: 2%
 Frequency 15,85 Hz

Mounting

Constant Current Excitation: 4 mA
 Mounting: Oil +Stud
 Orientation: vertical
 Vibration level for all frequency: 3 m/s²
 Except for frequencies lower or equal then 5,01 Hz lower acceleration.
 Bias voltage: 10,15 Volt

3. Frequency response Y Axis



Measurement uncertainty : 20 Hz to 5 kHz is 3 %

4. Sensitivity Y Axis reference 15,85 Hz

Input Frequency Hz	Dev %	Dev dB DUT
5,01	-0,9	-0,08
6,31	-1,3	-0,11
7,94	-0,3	-0,03
10,00	-0,1	-0,01
12,59	0,0	0,00
15,85	0,0	0,00
19,95	-0,1	-0,01
25,12	-0,1	-0,01
31,62	-0,3	-0,03
39,81	-0,7	-0,06
50,12	-1,3	-0,12
63,10	-2,4	-0,21
79,43	-3,9	-0,34
100,0	-6,7	-0,60
125,9	-9,9	-0,90
159,16	-16,1	-1,52
199,5	-25,0	-2,49

Test equipment

Description	Due date	Traceable to
Reference accelerometer	mei-15	DAkKS
Signal conditioner	mei-15	DAkKS
DMM	feb-15	RvA
DMM	feb-15	RvA