

# zLogg LLC

#### **CALIBRATION CERTIFICATE**

Brand zLogg (www.z-logg.com)

Modelz1LcdMuSerial no.ZM660097Performed byzLogg LLCDate of calibration19-12-2016Valid til19-12-2017

### Before adjustment

Offered T	-37.82	19.96	59.96
Reading T	-37.87	19.97	59.91
Deviation	0.05	-0.01	0.05

Declaration calibration procedure zLogg loggers for temperature and/or relative humidity

zLogg LLC calibrates zLogg loggers for temperature and relative humidity, here after called the logger(s), according to the following procedure:

#### **Humidity:**

The technical calibration is performed in a room with a relative humidity level between 50% and 65%. In this room the loggers can stabilize for a period of at least one hour. After this period, the loggers are calibrated in a temperature and humidity controlled climate chamber, type Vaportron H-100L. After the required stabilization the humidity level is read with the aid of a Dostmann P655, with serial number 65502060115 and compared to all sensors.

Then the loggers are adjusted to meet a maximum deviation according to the manufacturers specifications of the concerned logger. The adjustment of the read humidity level of each logger is being calculated through a computer and software at three checkpoints and is re-installed in the logger. The first checkpoint is performed at 33% RH and the second at 50% RH and the third at 76% at 20°C, each with a stabilization period of at least 90 minutes. The readings of the humidity levels are checked and adjusted if needed.

## Temperature:

Calibration of the temperature sensors is done at six temperature check points (e.g. at -38°C -20°C 0°C, 20°C, 40°C and 60°C). The required temperature is reached in a Tenney Junior Environmental Test Chamber. The climate chamber is checked with a Dostmann P655 Thermometer with serial number 65502060115 equipped with a PT100 temperature sensor. The uncertainty is 0,015°C. After a minimal stabilization period of 90 minutes the temperature is read where possible as an average of the loggers last 10 samples. The applicable RVA traceability certificates of the used reference equipment (according to the calibration date) can be downloaded here. It is recommended to calibrate your multi trip recorders once a year.

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Saak Dertadian Technical service

(s.dertadian@z-logg.com)