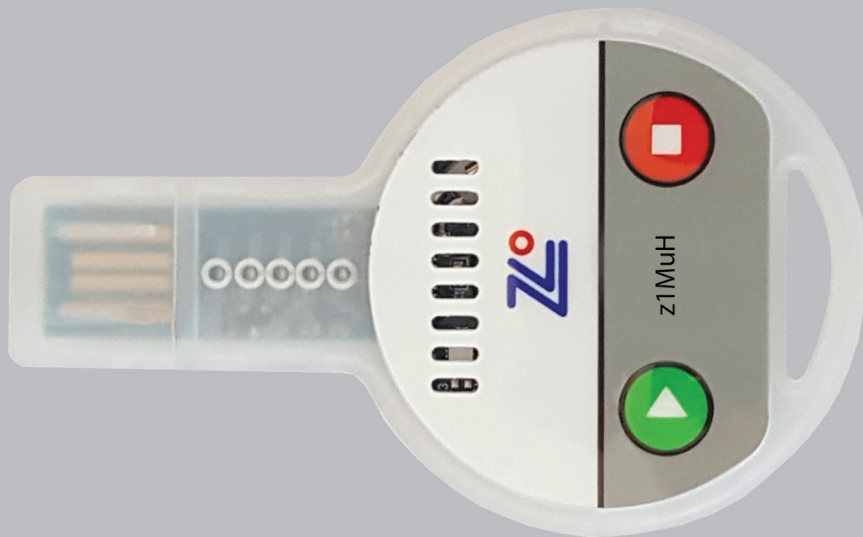**zLogg**

The zLogg z1MuH is an extremely accurate and low cost multi-use data logger for temperature and humidity, with 5X LED — blue for low alarms, green for no alarm and red for high alarms, visual indication of the current status (recording, stopped, battery level). The battery (non-replaceable) has a shelf life of up to 1 year for regular usage. When not in use, the logger is automatically placed in sleep mode to save the battery.

Once plugged into the USB port, the logger works like a USB stick that holds the automatically generated ZLG, TXT, CSV and PDF files. No zLogg software needed.

Where other suppliers choose to accompany their loggers with a basic manufacturers certificate, mentioning specifications based on theoretical calculations and prefabrication tests, every zLogg z1 will be individually calibrated before it leaves our lab. Its unique, traceable calibration certificate can be found 'in the cloud' by clicking a link on the PDF generated by the logger.

HIGHLIGHTS
- Extremely accurate over its whole measuring range
- Ultra-fine resolution of 0.01%RH and 0.015°C.
- Auto-generated PDF build in
- Customizable PDF reports
- Auto-generated CSV and TXT reports
- Multi-screen display
- One-click information of most trip parameters
- Extra large memory (45,568 records)
- Mark Readings
- Multi configurable, visual alarms
- Supports Windows/MacOSX/Linux
- Upgrade firmware with USB connection
- Free zLoggManager Software

zLogg LLC

CALIBRATION CERTIFICATE

Brand	zLogg (www.z-logg.com)
Model	z1LcdMu
Serial no.	ZM6C0001
Performed by	zLogg LLC
Date of calibration	19-12-2016
Valid til	19-12-2017

Before adjustment

Offered T	-33.10	19.32	71.94
Reading T	-32.91	19.43	71.76
Deviation	-0.19	-0.11	0.18

Offered RH	32.24	49.76	76.13
Reading RH	32.55	49.08	75.69
Deviation	-0.31	0.68	0.44

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

zLogg LLC calibrates zLogg loggers for temperature and relative humidity, hereafter 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, a Weisotron H-1000. 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, meet a maximum deviation according to the manufacturers specifications of the concerned logger. The adjustment of the reading humidity level of each logger is being calculated through a computer and software at three check points and is re-injected 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.

zLogg LLC

Saak Dertadian
Technical service
(s.dertadian@z-logg.com)

zLogg

SPECIFICATIONS

Order code	z1MuH
Logger type	Multi-use Temperature & Humidity Data Logger
Sensor	Digital Sensirion SHT31
Memory	45,568 records
Operating range	-40°C ~ +80°C (-40°F ~ +176°F) & 0 ~ 100%RH
Measuring range	-40°C ~ +80°C (-40°F ~ +176°F) & 0 ~ 100%RH
Accuracy	±0.3 °C over the complete measuring range ±2 %RH from 0% to 90%
Resolution	0.015 °C and 0.01 %RH
Time accuracy	±15 minutes / year
Buttons	2, Start & Stop
Start options	Manual start with or without delay Auto Start on date and time Auto Start on set temperature with or without delay
Stop options	Auto Stop after a set period Auto Stop on date and time Manual Stop
Marked readings	8x
Log interval	1 second to 24 Hours
Alarms	4, total and/or consecutive
Sensor response time	Better than 7 minutes (T90) in moving air.
Battery	Not replaceable
Battery life	Up to 1 year for a normal usage
Display	5 x LEDs blue, green, red
Connection/Interface	Direct to computer/USB Mass Storage Device
Auto generated files	ZLG, TXT, CSV, PDF (in all supported languages)
Export file types	ZLG, TXT, CSV, PDF
Software Support	zLoggManager
Compatibility	Windows, Mac OS X, Linux
Calibration	Individual calibration certificate per logger
Certificates	CE, RoHS
Dimensions	78 x 48 x 9mm
Weight	16g
Housing	ABS
Protection class	IP30
Security	Password protection
Warranty	1 year

Start, Stop & LED:
- **Ready:** Geen led blink every 8sec.
- **Record:** led blink twice every ▮ 4sec.
- **Battery**: press and hold both ▮ buttons. Green= High
  - Red = Medium
  - Blue = Low
- **Start:** Press and hold green button.
- **Stop:** Press and hold red button.