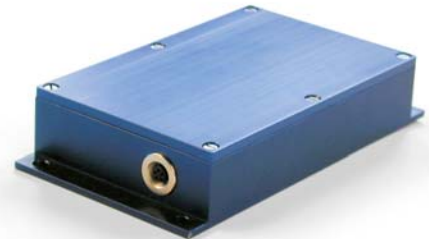


# **g-log data logger data sheet**

g-log 数据记录仪技术资料

For g-log sth1 usb / sth1E usb

适用于 sth1 usb 和 sth1E usb  
有 [sth1-35](#) (精度更高) 和 [sth1-70](#) (范围更广) 两款可选



**Shock measurement on all 3 axes**

在三条轴上都进行冲击测量

**Detailed shock curve with time stamp**

带时间戳的详细冲击曲线

**External temperature and humidity sensor**

外部温度和湿度传感器

**Dew Point calculation**

露点计算

**Battery life 24 months**

电池寿命 24 个月

**Tamper-proof - password protected**

防篡改——密码保护

**Stabile aluminum housing - easy mounting**

稳固铝制外壳——安装方便

**Extremely simple evaluation with software provided**

非常方便使用提供的软件进行评定

**g-log data loggers (g-log 数据记录仪)**

The g-log series meets all requirements: large memory capacity, alarm messages, long battery life, simple operation and evaluation. (g-log 系列满足全部要求: 高存储容量、提供警报信息、电池寿命长、易于操作、评定方便。)

**Features 特征**

With the g-log data logger, accelerations (impacts, jolts) and the temperature at the time of the impact can be recorded. The progress over time of the accelerations is recorded on all three axes for all events. Additionally, a combined temperature and humidity sensor for the g-log sth1 allows to record climatic values. This makes the g-log data logger the ideal tool for detailed transport monitoring and packing checks. The related LogView PC software for programming, graphical and numerical display of the measured values and print-outs enables easy data analysis and logger programming. LogView can be used with all g-log data loggers. 利用 g-log 数据记录仪, 在冲击时可以记录加速度(冲击、震动)和温度。在任何情况下, 加速度随时间的变化在三条轴上都得以记录。此外, g-log sth1 的组合式温度和湿度传感器允许记录气候值。这使 g-log 数据记录仪成为详细运输监控和包装检查的理想工具。用于编程、测量值图形和数字显示以及打印输出的 LogView PC 软件方便了数据分析和记录仪编程。LogView 可以用于所有的 g-log 数据记录仪。

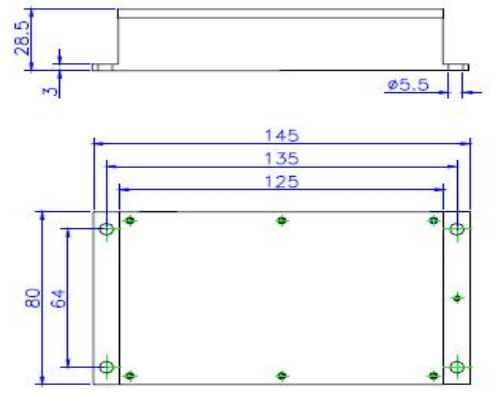
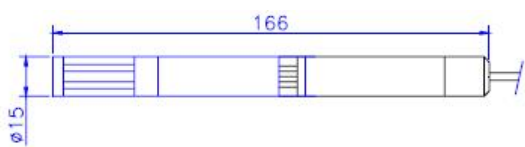
**Security 安全**

All data are stored in the logger in a non-volatile memory. This means the measured values are retained even in the case of a battery failure. Any access to the programming of the unit requires a password, and all changes are logged. This ensures that measurements cannot be tampered with and any tampering attempts are detected immediately. 所有数据均存储在非易失性存储器的记录仪中。这意味着即使发生电池失效, 测量值依然得以保存。对本装置进行任何编程均需要密码, 所有变更都记录下来, 从而确保测量值不被篡改, 并且可以立即检测到任何企图篡改的行为。

**Housing 外壳**

The g-log series was developed for use under difficult conditions. The measuring electronics is protected with a sturdy, splash-water resistant aluminium housing. (IP 65)开发 g-log 系列是为了将其用于恶劣条件。电子测量器材由坚固的、防水铝制外壳保护。(IP65)

**Mounting 安装**

<p style="text-align: center;">Data Logger 数据记录仪</p> 	<p style="text-align: center;">Mounting Guidelines 安装指南</p> <p>The data logger must be rigidly connected to the object to be monitored (screw connection with M5 bolts. When positioning the unit it should be ensured that no damping material is located between the object to be monitored and the data logger, as otherwise the measurements will be falsified. An inadequate mounting of the unit can cause excessively high measured values if vibrations result between the goods to be monitored and the data logger. 数据记录仪必须与拟监控物体牢固连接(用 M5 螺栓进行连接)。定位本装置时应确保拟监控物体和数据记录仪之间没有阻尼材料, 否则测量值会发生错误。如果本装置安装不当, 则当拟监控货物和数据记录仪之间发生振动时, 会产生过高的测量值。</p>
<p style="text-align: center;">Temperature and Humidity Sensor (sth1) 温度和湿度传感器 (sth1)</p> 	<p style="text-align: center;">Mounting Guidelines 安装指南</p> <p>Make sure there is adequate air circulation, to ensure the sensor measures the climate of the goods to be monitored. 确保空气充分流通, 从而保证传感器能够测量拟监控货物所处的气候。</p>



Technical Data 技术数据

General Information (一般信息)	3-axis curve recorder for acceleration (加速度三轴曲线记录仪)
Housing (外壳)	Aluminum anodized, splash-water protected IP 65 (阳极氧化铝、防水 IP65)
Dimensions (尺寸)	145x80x29 mm
Weight (重量)	approx. 470g (大约 470g )
Battery (电池)	2x UM3 lithium thionylchloride 3.6 V (2x UM3 锂亚硫酰氯电池 3.6V )
Current drain standby mode (耗用电流备用模式)	approx. 60 μ A (大约 60 μ A )
Current drain measurement (耗用电流测量)	typ. <30mA, 50mA max. (典型值.<30mA, 50mA max.)
Battery life (电池寿命)	>15000 hr
Memory (存储器)	Non-volatile, SRAM with buffer battery (非易失, 带缓冲电池的静态存储器)
Memory capacity (存储容量)	4MByte (appr. 9000 shock events and 400' 000 temperature/humidity values) 4MByte (大约 9000 次冲击事件, 和 400' 000 个温度/湿度值 )
Memory mode (存储模式)	When memory is full, smallest values are overwritten (当存储器存满时最小值被覆盖)
Internal sensors (内部传感器)	Acceleration (shock, vibration), temperature (加速度(冲击、振动), 温度)
External sensors (外部传感器)	temperature and humidity (温度和湿度)
Digital IO (数字 IO)	none 无
Control Buttons (控制按钮)	start/stop internal, E-Versions with external buttons (内部开始/停止, 带外部按钮的)
Indicators (指示灯)	2 LED red/green (alarm status, unit status, measurement active) 两个发光二极管, 红色和绿色 (警报状态、装置状态和动态测量)
Programming/evaluation (编程/评定)	with LogView PC software (利用 LogView PC 软件)
Measurement start/end (测量开始/停止)	Programmable or with start/stop button (可编程, 或者配有开始/停止按钮)
Connection to PC (连接 PC)	RS-232, 57600 Baud, USB 203400 Baud (RS-232, 57600 波特, USB 203400 波特)
Operating range (工作范围)	-30° C to 85° C (-30° C 到 85° C)

Acceleration sensor (加速度传感器)	
Unit of measure (测量单位)	g
Measuring sensor (测量传感器)	Internal micro-mechanical sensor, static acceleration measurement 内部微机械传感器静态加速度测量
Measuring range (测量范围)	sth1-35: -35g 到 35g      sth1-70: -70g 到 70g
Measuring interval (测量间隔)	Continuously ready for measurement, adjustable trigger threshold 可以持续测量, 触发阈值可调节
Wake-up time (唤醒时间)	Typ. 1ms, max. 2ms (from reaching of trigger threshold to recording) 典型值 1ms, max. 2ms (从达到触发阈值到记录时)
Trigger threshold (触发阈值)	sth1-35: 0.4g 到 5g      sth1-70: 2g 到 20g
Sensor resolution (传感器分辨率)	0.3% (of measurement range) (测量范围的) 0.3%
Sensor accuracy (传感器准确度)	1% (of measurement range) (测量范围的) 1%
Measuring axes (测量轴)	Tri-axial (X, Y, Z) 三条轴(X、Y、Z)
Event length (事件时长)	automatic 自动
Sampling rate (采样频率)	2 kHz (scan rate = 0.5ms); 2 kHz (扫描速度= 0.5ms)
Frequency range (频率范围)	Adjustable (programmable filter) 可调节 (可编程滤波器)

Temperature sensor (internal, during shock measurement only) 温度传感器 (内部, 仅在冲击测量时使用)	
Unit of measure 测量单位	°C or °F °C 或者 °F
Measuring sensor 测量传感器	Internal temperature sensor 内部温度传感器
Measuring range 测量范围	-40° C to 85° C -40° C 到 85° C
Measuring interval 测量间隔	Temperature measurement during shock event 冲击事件期间的温度测量
Sensor resolution 传感器分辨率	1 °C
Sensor accuracy 传感器准确度	3 °C
Sensor positioning 传感器定位	Internal 内部

Temperature and humidity sensor (external) 温度和湿度传感器 (外部)	
Unit of measure 测量单位	°C or °F / %rH °C 或者 °F / %rH
Measuring sensor 测量传感器	combined external sensor for temperature and humidity (Hygromer®-C94, Pt-100) 组合式外部温度和湿度传感器(Hygromer®-C94, Pt-100)
Measuring interval 测量间隔	adjustable, 10s bis 5h 可调节, 10s bis 5h
Measuring range temperature 测量温度范围	-40°C to 85°C -40° C 到 85° C
Sensor resolution temperature 传感器温度分辨率	0.04°C
Sensor accuracy temperature 传感器温度准确度	±0.3°C
Measuring range humidity 测量湿度范围	0%rH to 100%rH 0%rH 到 100%rH
Sensor resolution humidity 传感器湿度分辨率	0.04%rH
Sensor accuracy humidity 传感器湿度准确度	±1,5%rH (±1,0%rH with SCS-certificate) ±1,5%rH (±1,0%rH, 有 SCS-证书)
Housing 外壳	IP65
Max. cable length 最大电缆长度	2m

**Compliance 合规性**

The device is conform to all requirements of the following standard :DIN 30787-6:2001: Transportation loads - Measurement and evaluation of dynamic mechanical loads - Part 6: Automatic recording systems for measuring random shock while monitoring transports

本器材符合以下标准的所有要求: DIN 30787-6:2001: 运输荷载-----. 动态机械荷载的测量和评定-----第 6 部分: 测量运输监控时随机冲击的自动记录系统。

**EMC Compliance (EMC 合规性)**

The device is conform to all requirements of the following standards:

EN 61326-1: 2006 (IEC 61326-1: 2005)

本器材符合以下标准的所有要求: EN 61326-1: 2006 (IEC 61326-1: 2005)

**Calibration and certification (校准和认证)**

All units of the g-log series are shipped with a calibration record.

DIN 30787-6 requires a re-calibration of the units every two years. Our calibration service covers all requirements of these normative documents.

g-log 系列的所有装置装运时均备有校准记录。DIN 30787-6 要求每两年对装置进行一次重新校准。我们的校准服务涵盖上述规范文件的所有要求。

**Products and Services 产品和服务**

**Data logger 数据记录仪**

sth1-XX /sth1-XX E (acceleration and temperature internal, climatic probe external)

内部加速度和温度, 外部气候探测器

**Software 软件**

LogView / LogView Professional Software to program, analyze data and report generation

LogView / LogView 专业编程软件, 分析数据和汇报发生情况

LogView Lite: free of charge viewer für LogView data files (LogView Lite: 用来阅读 LogView 数据文件的免费阅读器)

**Accessories 附件**

PC data cable (RS-232C or USB) PC 数据线 (RS-232C 或 USB)

Hygroclip temperature and humidity sensor Hygroclip 温度和湿度传感器

Cable for Hygroclip, 2m 用于 Hygroclip 的电缆, 2m

Cable for Hygroclip, 10 cm (for Hygroclip fastener) 用于 Hygroclip 的电缆, 10cm (用于 Hygroclip 的扣件)

Hygroclip fastener Set (2 pcs) Hygroclip 的扣件组 (两件)

**Services 服务**

Basic check, battery replacement 基本检查, 电池更换

Calibration of shock sensors 校准冲击传感器

Calibration of shock sensors with detailed certificate 校准有详细证书的冲击传感器

Service Hygroclip (calibration, new protection filter, new humidity sensor)

维护 Hygroclip (校准、新防护滤波器、新湿度传感器)

The contents of the above document is subject to change without notice. 以上资料和信息如有更改, 不另行通知。

2010/1/1