

ASPiON ■ G-Log 2

ASPiON ■ G-Log 2

Transport monitoring of shocks and climate

Wireless. Accurate. Long lasting.



ASPiON G-Log 2

data logger for shock and climate
technical data



INNOVATION BW
2021



ASPION G-Log 2 data logger for shock and climate

General product description

With the ASPION G-Log 2 shock data logger, you can record shocks, vibrations and climate data. It offers a 3-axis accelerometer and an integrated temperature and humidity sensor. The data logger saves measured acceleration values outside of defined thresholds and shock duration. You can record climate data permanently and/or only if values are higher or lower than a defined threshold. You can reuse the data logger repeatedly and for different transports.

Using the ASPION PC software, you can define thresholds and apply them to the ASPION G-Log 2 shock data logger. When reading out data from the data logger, the software displays the measured values. To set up the data logger, data is transferred wirelessly to and from the data logger using Near Field Communication (NFC) and a card reader which is connected via a USB interface to the computer. Alternatively, the data logger can be activated by smartphone app via BLE independently of the PC software (only available in combination with ASPION Premium service). This allows e.g. service providers to easily activate the data logger regardless of location.

To easily read out data from a data logger, you can use the ASPION app for smartphones. For this purpose, data can be transferred via NFC or Bluetooth Low Energy (BLE) - in this case also through packaging. Recorded events are either displayed or hidden using a PIN protection. Data can be sent from the app to the PC software via e-mail or automatically transferred via cloud-transfer (ASPION Premium service). The ASPION G-Log PC software then quickly analyses and further processes your data.

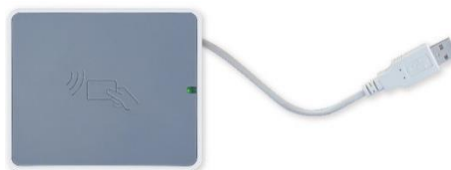
Each data logger as a unique ID which can be found on the label and in the barcode. Additionally, you can scan the QR code on the label with a smartphone. The user can directly access the respective app store to download the ASPION app.

The shock data logger is available in two versions:

- ASPION G-Log 2: housing with protection type IP 50; battery replaceable by user
- ASPION G-Log 2 Waterproof: waterproof version with encapsulation for outdoor use
housing with protection type IP 65/67; battery replaceable by user



ASPION G-Log 2 shock data logger for mounting on goods to be transported



USB card reader for activation and reading out data



ASPION PC software on USB stick or for download in the customer portal



ASPION PC software for Windows for activation, control and data analysis



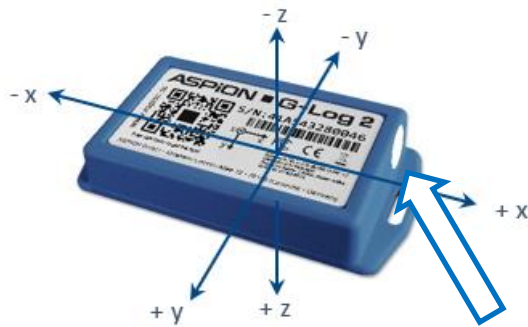
smartphone app for readout via NFC/BLE for Android from version 5.0 and iOS from version 11

Technical data ASPION G-Log 2 and ASPION G-Log 2 Waterproof

	Description	Details
Accelerometer	3 axes: x, y and z up to ±24 g per axis Measuring frequency DIN EN IEC 60721-3-2	<ul style="list-style-type: none"> up to ± 16 g calibrated, 2.5% accuracy, extendable up to ± 24 g approx. 3.5% accuracy, verified by accredited testing lab 0.2 g resolution Adjustable threshold from 0.2 g to 12 g Adjustable between 25 Hz and 1,600 Hz Shock/vibration testing 2M4 / 2M5 / 2M6
Temperature sensor	Calibrated by manufacturer Adjusted during production	<ul style="list-style-type: none"> -40°C ... +85°C with accuracy of ± 0.2°C 0.1°C resolution Lower and upper threshold freely selectable
Humidity sensor	Calibrated by manufacturer Adjusted during production	<ul style="list-style-type: none"> 0% rH ... 100 % rH non-condensing ± 2% rH accuracy; 0.1% rH resolution Adjustable thresholds
Memory/logging	Non-volatile memory Event and interval triggered with thresholds	<ul style="list-style-type: none"> Capacity: 950 events in circular buffers Additionally, shock details for the first and 8 highest peak events in permanent memory
Data transfer and analysis	Wirelessly via NFC with PC software and App	<ul style="list-style-type: none"> Data transfer via NFC Configuration and analysis with PC software and NFC-enabled reader
Near Field Communication (NFC)	NFC Tag (Type 4)	<ul style="list-style-type: none"> ISO/IEC 14443B compatible 13.56 MHz RF interface
BLE for data transfer	Bluetooth Low Energy for reading out the data via app or PC software; activation via app (only ASPION Premium)	<ul style="list-style-type: none"> Max. 10m range (line of sight) Min. Bluetooth 4.0 specification Can be switched off optionally Bluetooth Declaration ID: D047584
Battery	CR2032 3V Lithium 225 mAh battery replaceable, manufacturer Panasonic recommended	<ul style="list-style-type: none"> Battery life depends on data rate; up to 1.5-2 years; e.g. 1 year at 100 Hz; battery life may be shorter at lower temperatures Battery power level at delivery: full No battery consumption in delivery state until the battery pull tab is removed For transport including air freight no labeling obligation of the lithium metal button cell; IATA DGR compliant
Operating conditions	Operating temperature Storage temperature range Humidity range	<ul style="list-style-type: none"> -30°C ... +60°C 5°C ... +40°C 0% rH ... 100% rH, non-condensing
Version	ASPION G-Log 2: IP 50 protection ASPION G-Log 2 Waterproof: IP 65/67 protection	<ul style="list-style-type: none"> Sensor protected by membrane Weight: approx. 35 g Penetration of fluids is to be prevented Weight: approx. 50 g, dustproof/waterproof
Housing and mounting	ABS housing; Screw mounting; optional: industrial adhesive tape, magnets, cable ties	For ASPION G-Log 2 <ul style="list-style-type: none"> Dimensions: 88 mm x 45 mm x 16 mm Distance of mounting holes: 80 mm Tightening torque: 0.4 - 0.5 Nm

		<p>For ASPION G-Log 2 Waterproof:</p> <ul style="list-style-type: none"> ▪ Dimensions: 96 mm x 51 mm x 19 mm ▪ Distance of mounting holes: 85 mm ▪ Tightening torque: 0.4 - 0.5 Nm
Approvals/Standards	Declarations of conformity and directives	<ul style="list-style-type: none"> ▪ CE / ROHS / REACH / WEEE ▪ RED (EU) ▪ FCC (USA) ▪ IC (Canada) ▪ SRRC (China) ▪ DO160 (IATA) ▪ → for details see customer portal
Export information	Product tariff code Country of origin Data regarding legal control (ECCN or comm. control list)	<ul style="list-style-type: none"> ▪ 9031 8080 ▪ DE (EU) ▪ AI = no, ECCN = N

Mounting orientation

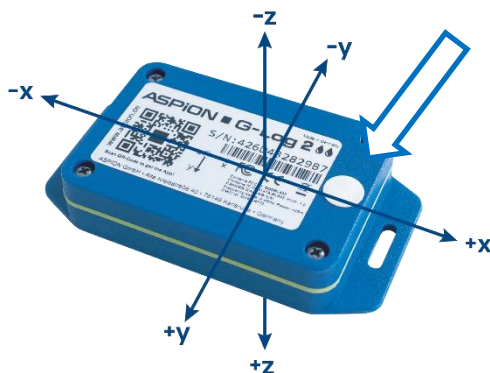


To correctly assign the axes in case of shock events, the mounting orientation is critical.

Recommended mounting for ASPION G-Log 2

- on steel: M3 ISO 7380 FL
- on wood/sheet metal: flathead screws with a maximum thread diameter of 3.5 mm (e.g., DIN 7981)
- tightening torque: 0.4 - 0.5 Nm

When mounting the ASPION G-Log 2 and ASPION G-Log 2 Waterproof, make sure that you do not damage the membrane used to protect the humidity sensor from splashing water. Furthermore, in order to record correct climate data, the climate sensor must not be shielded from the air, e.g. by packaging material.



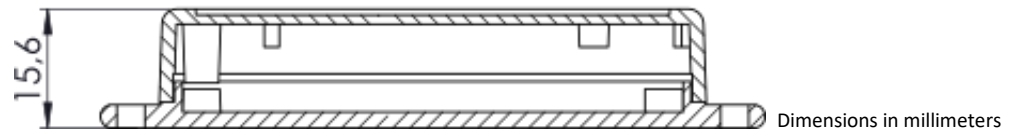
For ASPION G-Log 2 Waterproof

- on steel: M4 ISO 7380
- on wood/sheet metal: flathead screws with a maximum thread diameter of 3.9 mm (e.g., DIN 7981)
- tightening torque: 0.4 - 0.5 Nm

Alternatively fasten with industrial adhesive tape (e.g., of 3M 5925F), magnets or cable ties.

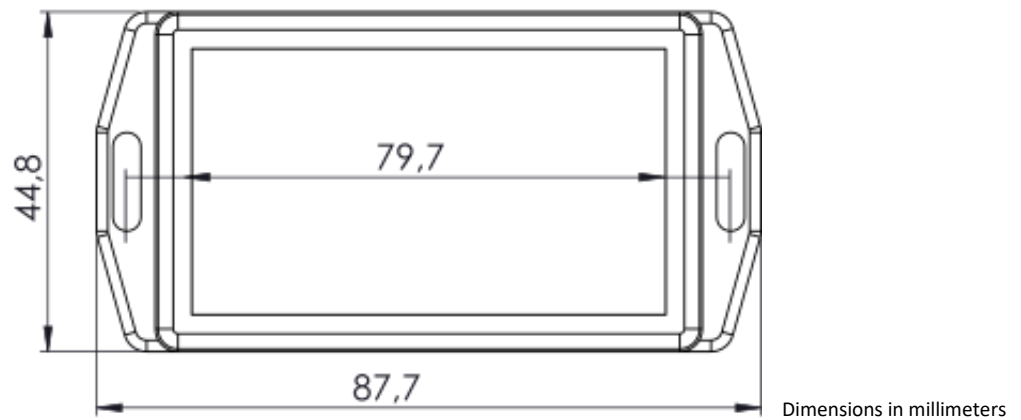
Housing dimensions and mounting template ASPION G-Log 2

Housing cross section



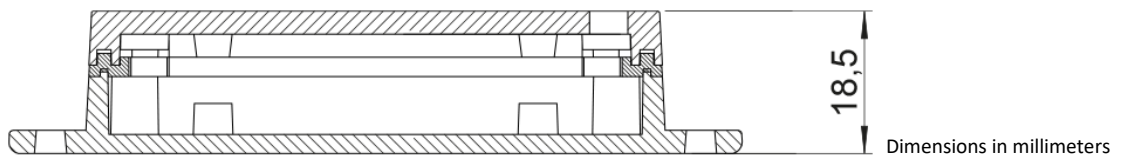
Housing measures

Mounting template 1:1



Housing dimensions and mounting template ASPION G-Log 2 Waterproof

Housing cross section



Housing measures

Mounting template 1:1

