

# SDL109 SHOCK DATA LOGGER



SDL109 is a battery operated data logger that can store acceleration pulses exceeding a given threshold.

This is achieved by performing a continuous sampling of the accelerations on three axes. The recorded events are associated with an accurate measure of the corresponding time. The SDL109 data logger has been specifically designed to record the dynamic situations that can be observed on cars, trucks, ships, aircraft etc.

This device can also be used to monitor the production lines of delicate instruments, sensors, mechanical storage devices, avionics and communication systems. The logger does not require any connection with external devices and relies on a non-volatile memory that assures data reliability also in case of complete discharge of the internal battery.

## Features

- Internal accelerometers
- Storage of the acceleration on three axes
- Programmable activation and shut down
- Password protection
- High autonomy
- External indication of the logger state
- Limited cost
- Indefinitely reusable
- PC connection by means of standard USB cable

## Applications

- Shipment monitoring
- Fragility testing
- Turbulence measurement
- Brake systems test
- Production lines monitoring
- Engine test

## SDL109 SPECIFICATIONS

- **Channels:** 3 axes + temperature
- **Acceleration range (g):**  $\pm 16$
- **Intrinsic accuracy (g):** 0.1 (-40°C to 70°C)
- **Stored data resolution (g):** 0.1
- **Sampling interval:** 2.5 ms (400 Hz)
- **Operating modes:** Two operating modes can be selected by the user. In the standard mode the data logger stores only the events (x, y and z accelerations) associated with values of the total acceleration larger than a selected threshold. In the alternate mode the user selects a time interval (between 30 s and 1 h) and the logger stores the event associated with the maximal total acceleration observed in every interval.

- **Temperature:** Storage of the logger temperature
- **Memory:** Up to 524.288 measures for every axis
- **Clock precision:**  $\pm 1$  minute per month
- **Battery:** 3.6 V lithium size AA, user replaceable
- **Battery life:** More than 14 days (typical)
- **Start/Stop:** Software programmable (password)
- **PC interface:** USB
- **Operating system compatibility:** Windows NT/2000/XP/Vista/Windows 7/Windows 8
- **Dimensions:** 83 mm x 94 mm x 36 mm
- **Weight:** 274 grams (with battery)
- **Operating temperatures:** -40°C to 70°C
- **Operating humidity:** 0 to 95% RH non-condensing
- **Approvals:** CE
- **Free download and data management software**

