

Shock Log®

To solve problems caused by:



Impacts





Temperature variations

Vibration, shock and environmental condition recorder

ShockLog Impact & Environmental Recorders continually monitor and report in real time the shock, vibration, and environmental conditions experienced by structures, facilities, and equipment during transit, storage and operation. These products record the direction, amplitude and duration of impact force.

Thanks to the field-proven triaxial piezoelectric accelerometer technology, **ShockLog** is able to give complete and reliable information.

The **ShockLog** recorders help to deter, monitor and minimize damage and are available in the following versions:

ShockLog 298: records the date and time of up to 870 shock and vibration events, time slots and summary data. Available also with TR (tilt and roll), GPS options, if necessary also in combination among them.

ShockLog 248: records up to 15 detailed shock events (the first one and the following 14 with higher intensity) with its graphic. It also records date and time of 128 shock events (not detailed) in the summary.

Main applications: offshore oil platforms and equipment, building structures and foundations, warehouses and storage facilities, packaging and vehicles in supply chain, lasers, missiles and satellites, power transformers, nuclear materials, biomedical supplies, wind turbines and much more.

On request it is possible to have optional sensors to record changes in temperature, humidity, atmospheric pressure, tilt and roll. A GPS/ GPRS tracking module is available to pinpoint the location of mishandling or exposure to unfavorable conditions.

Only with ShockLog 298 is available an optional, the **ShockLog Satellite**, that makes possible a satellite connection.









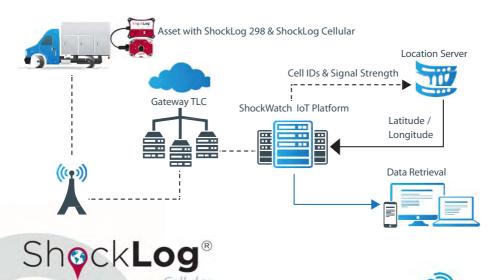
Benefits:

- · Decreases costs related to damage incurred during operation, shipping, handling and storage
- Helps identify optimal modes of transportation, routes, packaging, storage options and operational conditions through full-journey profiling
- Deters improper handling and operation
- · Allows sender to respond to mishandling of shipments before customer delivery
- · Alerts recipients and operators to inspect goods and equipment for potential damage
- Isolates when and where unacceptable conditions occur and aids in the identification of accountable parties
- Allows for immediate corrective action in cases of potential impact, vibration, temperature, humidity and pressure extremes
- · Pinpoints potential areas for improvement in operational or shipping and handling processes
- · Confirms acceptable conditions during equipment operation, shipping and handling, and storage

Comprehensive Windows-based software provides a simple user interface for communicating with the **ShockLog** device. Robust procedures for setup and data download allow for quick deployment and easy data analysis.







Real time information...

ShockLog Cellular gives you real-time information about your assets from anywhere in the world. ShockLog Cellular is an accessory that easily connects to any ShockLog 298 impact recorder with a cellular communication module to deliver real-time notifications of unacceptable handling in the supply chain. This device alerts you when your shipment has experienced an out of tolerance impact, temperature, humidity, tilt, roll or pressure conditions. The information is accessible

via a user-friendly SpotSee Cloud from anywhere in the world. With the financial impact of cargo loss exceeding \$50 Billion annually,

ShockLog Cellular enables you to know that your assets are travelling safe and sound to their destination.

Features:

- Connects to any new or existing ShockLog 298 with firmware ≥ V.30.
- · Real-time alerts, location and impact value information when an event occurs.
- ShockLog Cellular utilizes global cellular networks 2G/3G to send data into the SpotSee online
 portal. Cellular networks are widely deployed worldwide and, unlike satellite, will work without line of
 sight. ShockLog Cellular can be used in warehouses and in closed containers. If a cellphone
 indicates network availability, ShockLog Cellular will have service.
- Robust battery life is ideal for long journeys of up to 90 days when reporting at 1 hour intervals.
- · Easy-to-use cloud-based interface that is accessible anywhere in the world.
- · Low six-month connectivity cost, without international roaming fee.





Cellular software:

During the journey, **ShockLog Cellular** will track your asset and alert you of any impact in real time. You can monitor your assets from wherever you are through a user-friendly cloud-based portal.

ShockLog analysis software:

When the journey has concluded, the ShockLog 298 allows you to download and analyze the full data set. The ShockLog Report View provides an overview of the entire journey: peak acceleration values for all three axes reported on a time basis as well detailed impact curves. Zoom in for a closer view, or export data into programs such as Excel and Matlab for more detailed analysis.





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