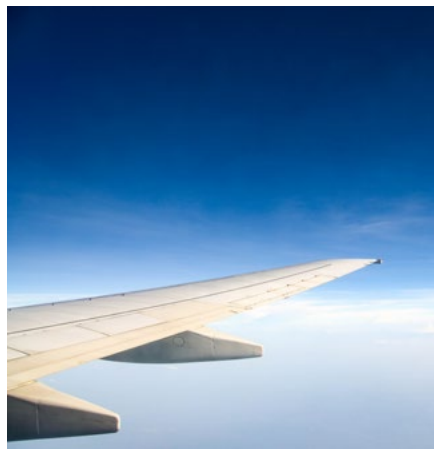




Impact Recorders Comparison Guide



- **Helps identify optimal modes of transportation, routes, packaging, storage options, and conditions through full-journey profiling**
- **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 corrective action in cases of potential impact, vibration, tilt, roll, temperature, humidity, and pressure extremes**
- **Pinpoints potential areas for improvement in operational or logistics processes**

ShockWatch impact and environmental recorders continually monitor and record 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 impacts and internal temperature. Optional sensors record 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. SpotSee recorders help deter, monitor and minimise damage.

Selection Guide



SpotBot Cellular

Delivers tri-axial impact and temperature condition monitoring through cellular connectivity. Unacceptable impact events and temperature conditions are visualised through the SpotSee Cloud.



ShockLog Cellular

Combines the power of the ShockLog 298 Impact Recorder with cellular communication to deliver impact recording, real-time reporting and asset location. Impact, location and summary data can be accessed in the SpotSee Cloud.



ShockLog Satellite

Combines the flagship ShockLog 298 Impact Recorder with satellite communication and GPS location to deliver outstanding impact recording, real-time reporting and asset location, which can all be viewed in the SpotSee Cloud.



ShockLog 298

Records complete shock curve of up to 870 impact events. Reports peak values (x, y, z), internal temperature and summary data. Options to report external temperature, humidity, tilt, roll, pressure, and GPS coordinates. Software tools provide post-journey data analysis.



ShockLog 248

Records complete shock curve of first and 14th most significant impacts. Reports peak values (x, y, z), internal temperature and summary data. Options to report external temperature and humidity. Software tools provide post-journey data analysis.



SpotBot BLE

A low-cost data recorder for monitoring impact, tilt, temperature and humidity. Data connection via Bluetooth to a free mobile application.



g-View

A low-cost option ideal for monitoring impact excursions (x, y, z) and internal temperature.



Spotsee Cloud

The SpotSee Cloud is where trip data is aggregated in real-time. The Cloud features visualisations for multiple units. The graphs are easy to read and include data such as specifics of impact with locations, impacts over time, histogram, and temperature.

- Access to data from wherever you are with a secure web portal
- Impact Alarms with g-level and direction

- Temperature Alarming for two temperature thresholds with location of excursion
- Impacts-over-time visualisation of each asset
- Histogram of asset's impacts
- Time-temperature graph
- Real-time reporting and tracking of incidents

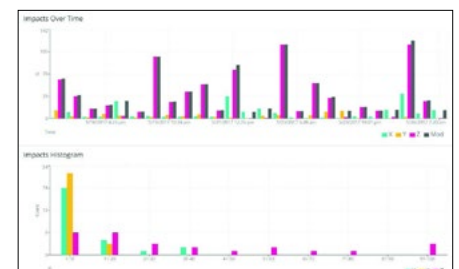
Real-time Reporting

The SpotSee Cloud tracks location and impacts in real-time. Summary

information is sent to the cloud at predetermined intervals so you always know the status of your asset.

Optional Capabilities

See all your asset alarms including location, time, impact g-level, and direction of impact. The data visualises impacts over time so you can easily spot the higher outliers. The histogram is a quick view of the units impacts grouped by g-level.



Feature Comparison Guide

	SpotBot Cellular	ShockLog Cellular/Satellite	ShockLog 298
Selection Criteria	Threshold monitor with cellular communication / location	Complete journey profiling with location and real-time comms	Complete journey profiling Expandability for future requirements vibration monitoring
Recorder Type	Threshold	Complete event & max peak	Complete event & time slot (max peak)
Standard Measurements	Triaxial over threshold and internal temperature	Triaxial acceleration, max peak, internal temperature	Triaxial acceleration, gRMS vibration, max peak, and internal temperature
Number of Events	Unlimited in cloud; top 10 in PDF; top 50 in CSV	Unlimited in cloud; up to 870 on device	Up to 870
Amplitude Scale	65G max	User programmable: 1G, 3G, 10G, 30G, 100G, or 200G	User programmable: 1g, 3g, 10g, 30g, 100g or 200g
Frequency Filter	N/A	User programmable: 10Hz, 40Hz, 50Hz, 90Hz, 120Hz or 250 Hz	User programmable: 10Hz, 40Hz, 50Hz, 90Hz, 120Hz or 250 Hz
Battery Life	Up to 75 days (~1x per hour)	Satellite: Up to 1 year Cellular: Up to 75 days (1x/hour)	Up to 18 months / 2xAA size 3.6V (lithium batteries recommended)
Expandability	N/A	Satellite: Tilt & roll Cellular: Temperature, humidity, pressure, tilt & roll	Temperature/Humidity/Pressure/ Tilt and Roll GPS Coordinates
Alert	LED; notification via SpotSee Cloud	LED; notification and SpotSee Cloud	LED – Running, warning and alarm
Data Transfer / Comms	USB, Cellular	USB, Cellular/Satellite	USB & i-Button interface Optional RF interface
Ingress Protection	IP67	Satellite: NEMA 1, 3, 4x, 6P, 12 Cellular: IP67	IP67

Feature Comparison Guide

	ShockLog 248	SpotBot BLE	g-View
Selection Criteria	Full-journey profiling impact recorder at a low price point	Low-cost threshold monitor with BLE phone app	Low-cost threshold monitor; simple software with export to Excel
Recorder Type	Event & time slot (max peak)	Threshold	Event threshold
Standard Measurements	Triaxial acceleration and max peak and internal temperature	Modulus over threshold (impact), temperature, humidity, tilt & roll	Triaxial over threshold and internal temperature
Number of Events	Up to 15 (1st plus 14 most significant)	2 year (15min measuring cycle) memory capacity	Up to 100 per axis
Amplitude Scale	Fixed scale: 10g, 30g or 100g	8G	Fixed scale: 10g or 25g
Frequency Filter	Fixed value: 40Hz, 90Hz, 250Hz	N/A	Fixed value: 25Hz or 40Hz
Battery Life	Up to 12 months. 1xAA size 3.6V lithium battery recommended	2 years (10 min measuring cycle)	Up to 6 months / 1xAA alkaline
Expandability	Temperature/Humidity	N/A	N/A
Alert	LED – Running and alarm	LED	LED – Alarm
Data Transfer / Comms	USB & i-Button interface	BLE	i-Button interface
Ingress Protection	IP67	IP54	IP65