



## SHOCKLOG®

The ShockLog® range is a sophisticated, durable and extremely accurate shock and vibration recorder. In addition to accurately recording shock and vibration, users can opt to monitor levels of relative humidity, temperature, dew point and tilt & roll. With the addition of external sensors, remote humidity, pressure and temperature can be recorded. This is typically used for monitoring the internal environmental conditions where an objects internal elements are environmentally sensitive i.e. monitoring the core of a power transformer.

Connectivity is provided by internal USB for remote connections an internal radio option is available.

The World-leading ShockLog® range features advanced tri-axial piezo electric accelerometer technology providing fast response recording combined with exceptionally low power consumption. Advanced software allows users to analyse a journey. The data is presented in easy to understand sections, these are:

- Slots provide a bar chart view of the entire journey clearly showing areas of high activity
- Summaries provide the data in a tabular view
- Events provide the user with a detailed information of each individual event (not available on the 208)

From the entry-level 208, to the top of the range 298 we will have an instrument that will suit your application and budget.

### Product Features

- Completely self-contained (battery-operated)
- Three built-in piezo accelerometers
- Rugged aluminium IP67 housing
- Adjustable alarm thresholds
- Powered by low cost standard AA lithium batteries
- LED operation and alarm status indicators
- All data is date and time stamped
- Complete journey profile
- Tamper-proof factory and user passwords
- Data stored in non-volatile memory
- Huge dynamic range
- Long battery life

### Benefits

- Decreases costs related to damage incurred during shipping, storage and operation
- Highlights improvement areas in shipping and handling processes
- Identifies when and where unacceptable conditions occur and assists users in identifying accountable parties
- Operational and journey profiling



## SHOCKLOG® 208

An entry level impact monitoring solution for time slots only

### Factory Fit Options

Humidity & Temperature sensor

### Accessories Available

Y055: Set up communications cable

88706: AA lithium 3.7V battery

298SI: ShockLog® full iButton set

248-208MM: ShockLog 248/208 Magnetic Mounting Plate Kit



iButtons

## SPECIFICATIONS

### Instrument:

Dimensions:	88 x 84 x 55mm
Weight:	450 grams
Power supply:	1 x 3.6V Lithium Thionyl Chloride battery
Battery Life:	Up to 12 months

### Sensor:

Operating temperature range:	Extended range -40°C to +85°C
Internal Temperature Range:	40°C to +85°C
External Temperature Measurement Range:	40°C to +85°C
External Temperature Accuracy:	-2°C to +2°C (full range)
Humidity Range:	0 – 100% RH
Humidity Accuracy (25 - 75 %RH):	-3 to +3% RH
Scale Factor:	±2%
Acceleration Ranges:	±10 or 100g
Dynamic Range:	1% -100% of range
Frequency Range:	10g unit 40Hz 100g unit 250Hz
Recording Methods:	Slots & summaries



## SHOCKLOG® 248

Records date and time of up to 15 shock events, time slots and summary data

### Factory Fit Options

Humidity & Temperature sensor

### Accessories Available

Y055: Set up communications cable

88706: AA lithium 3.7V battery

298SI: ShockLog® full iButton set

248-208MM: ShockLog 248/208 Magnetic Mounting Plate Kit



iButtons

## SPECIFICATIONS

### Instrument:

Dimensions:	88 x 84 x 55mm
Weight:	450 grams
Power supply:	1 x 3.6V Lithium Thionyl Chloride battery
Battery Life:	Up to 12 months

### Sensor:

Operating temperature range:	Extended range -40°C to +85°C
Internal Temperature Range:	40°C to +85°C
External Temperature Measurement Range:	40°C to +85°C
External Temperature Accuracy:	-2°C to +2°C (full range)
Humidity Range:	0 – 100% RH
Humidity Accuracy (25 - 75 %RH):	-3 to +3% RH
Scale Factor:	±2%
Acceleration Ranges:	±10, 30 or 100g
Alarm thresholds (%):	11 to 95% (% of range)
Dynamic Range:	0.1% -100% of range
Frequency Range:	10g unit 0.1 – 40Hz 30g unit 0.1 – 90Hz 100g unit 0.1 – 250Hz
Recording Methods:	Slots, summaries & events
Event Sampling Rate:	Up to 1024 s/s per axis
Event Duration:	4 to 32 Seconds
Maximum Number Of Events:	15

## SPECIFICATIONS

### Instrument:

Dimensions:	123 x 78 x 55mm
Weight:	500 grams
Power supply:	2 x 3.6V Lithium Thionyl Chloride batteries
Battery Life:	Up to 18 months

### Sensor:

Operating temperature range:	Extended range -40°C to +85°C
Internal Temperature Range:	40°C to +85°C
External Temperature	40°C to +85°C
Measurement Range:	
External Temperature Accuracy:	-2°C to +2°C (full range)
Humidity Range:	0 – 100% RH
Humidity Accuracy (25 - 75 %RH):	-3 to +3% RH
Scale Factor:	±2%
Acceleration Ranges:	1, 3, 10, 30, 100 & 200g
Velocity Ranges:	3, 10, 30, 100 & 200cm/s
Warning Threshold (%):	5 to 95% (% of range)
Alarm thresholds (%):	5 to 95% (% of range)
Dynamic Range:	1mg to 200g
Frequency Range:	0.1 – 250Hz user selectable
Recording Methods:	Slots, summaries & events
Event Sampling Rate:	Up to 4096 s/s per axis
Event Duration:	1 to 128 Seconds
Maximum Number Of Events:	870



## SHOCKLOG® 298

Records date and time of up to 870 shock and vibration events, time slots and summary data.

### Factory Fit Options

Humidity & Temperature sensor  
Internal Tilt & Roll  
Internal GPS



iButtons

### Accessories Available

- Y055:** Set up communications cable
- 88706:** AA Lithium 3.7v battery
- 298SI:** ShockLog® full iButton set
- 298MM:** ShockLog 298 Magnetic Mounting Plate Kit



29920: HPT (humidity, pressure & temperature) 1bar



29920B2: HPT (humidity, pressure & temperature) 2 bar

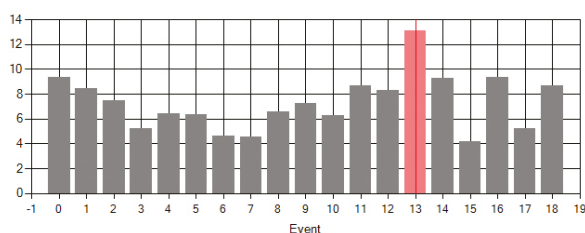
## ADVANCED SOFTWARE CAPABILITIES

The highly comprehensive ShockLog® software provides a multitude of analysis capabilities:

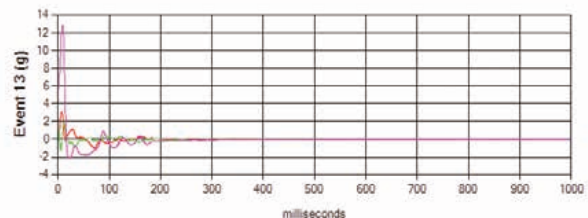
**Summary of events** – provides details of the first alarm, first warning and most severe events seen within the profile journey.

	Event	Axis	Date/Time	Modulus (g)	Temp (°C)
First Alarm	0	Z	12/21/2012 1:34:58 PM	9.39	22.90
First Warning	6	Z	12/23/2012 9:04:26 AM	4.61	19.10
Most Severe	13	Z	12/27/2012 9:07:51 AM	13.10	17.00
Event Summary	19 Events (3 Warnings, 16 Alarms)				

**Event Summary Graph (available on 248 and 298)** – displays in a bar chart format showing the modulus value of all events recorded within the data file and highlights the most severe Event by displaying it in red.



**Detailed Event Curve (available on 248 and 298)** – displays the magnitude and duration of the impact event, with the X axis displaying the time in milliseconds and the Y axis showing the force of the impact in G.



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