Aritech offers a full range of proven shock sensors which provide reliable perimeter protection 24 hours a day. A break-in is detected as soon as the intruder attempts to force, smash, drill, or even saw the protected window, frame or door, which means the alarm is activated whilst the intruder is still outside. This minimises damage to the building and maximises personal security, since shock sensors can be armed 24 hours a day, allowing unrestricted movement throughout protected premises.

Superior detection
Its unique design enables it to discriminate between a real break in attempt and everyday background noises by measuring the shock frequency caused by the displacement in the protected structure.

The sensor is designed to activate (contact will open) when an acceleration greater than 1G is detected. This could be caused, for example by a strong blow, a high speed drill or sawing because the frequencies of these shocks fall within the sensor’s range of detection.

Excellent false alarm Immunity
Vibrations caused by traffic, rain or wind will not cause the sensor contact to open because a specially designed damping cylinder inside the sensor head absorbs the energy of these minor shocks, therefore preventing false alarms.

Background vibrations tend to have very high or very low frequency levels which cannot reproduce an acceleration greater than 1G without causing significant structural damage. For example, at a frequency of 4 Hz, which could be a lorry passing by, an acceleration of 1G would result in a structural displacement of 10 cm, which equates to earthquake conditions.

Moreover, both detection levels can be adjusted so that the installation can be fine tuned to the environment and fully tested using the walk test facility. This digital signal processing is designed to eliminate false alarms and assure reliable detection of all types of attack.

Wide Range of Applications
All models can be mounted on any solid structure through which an attempted break-in is likely to occur, including: metal, concrete, brickwork, glass and wood. This embraces a whole host of applications ranging from protection of windows, doors, roofs, skylights, walls, display cabinets and many more.

Quality Manufacturing
The critical sensing device is manufactured in a dust-free environment to avoid contamination, therefore ensuring optimum performance and a long life. These components are individually tested and ultrasonically welded to provide maximum protection against corrosion.

Comprehensive Range
With a full line of shock sensors, including stand-alone versions and models with optional magnetic contact, we can provide a product for every application need.
**Shock sensors**

**GS 610/611 & GS 612/613 Shock sensors**

The GS 610 & GS 612 shock sensors offer a versatile solution for detection of forced entry through windows, doors, walls and roofs. They can be mounted throughout a 360º axis, vertically and horizontally, by ensuring that the Aritech logo is readable from left to right.

Both models have optional magnetic contacts for double protection on opening doors and windows.

**GS 614 & GS 615 Analysers**

These simple multi-count analysers provide a sensitivity setting for both gross attack and programmable pulse count, between 1 and 9 counts. Both models include on-board voltage regulation and LED indication for test and alarm indication.

The GS 615 offers end-of-line resistor and a manual reset facility.

Up to 12 shock sensors can be connected to one analyser (IS 199 standard).

**GS 620 Stand-Alone Shock Sensor**

The GS 620 is a latching and LED indicating stand-alone version of the GS 610 which includes adjustable gross attack and pulse count sensitivity. It also features first to the alarm and subsequent to alarm LED indication and provides a selectable walk-test facility.

### How to choose the right shock sensor

<table>
<thead>
<tr>
<th>Model</th>
<th>Range site</th>
<th>Mounting indication</th>
<th>LED indication</th>
<th>Reed</th>
<th>Colour</th>
<th>Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GS 610</td>
<td>Up to 6 metres depending on surface</td>
<td>Glass, frame wall or roof</td>
<td>NO</td>
<td>GS 611</td>
<td>White/brown</td>
<td>72 x 27 x 21</td>
</tr>
<tr>
<td>GS 612</td>
<td>Up to 6 metres depending on surface</td>
<td>Glass, frame wall or roof</td>
<td>NO</td>
<td>GS 613</td>
<td>White/brown</td>
<td>70 x 30 x 28</td>
</tr>
<tr>
<td>GS 710</td>
<td>Up to 6 metres depending on surface</td>
<td>Glass, frame wall or roof</td>
<td>NO</td>
<td>GS 711</td>
<td>White/brown</td>
<td>72 x 27 x 25</td>
</tr>
<tr>
<td>GS 620N</td>
<td>Up to 6 metres depending on surface</td>
<td>Glass, frame wall or roof</td>
<td>YES</td>
<td>NO</td>
<td>White/brown</td>
<td>93 x 30 x 25</td>
</tr>
</tbody>
</table>

### Technical Data

<table>
<thead>
<tr>
<th></th>
<th>GS 610/611</th>
<th>GS 612/613</th>
<th>GS 710/711</th>
<th>GS 614/615</th>
<th>GS 620 N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>10-15 V dc</td>
<td>8-15 V dc</td>
</tr>
<tr>
<td>Current Consumption</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>10 mA</td>
<td>8 mA</td>
</tr>
<tr>
<td>Quiescent Alarm</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>50 mA</td>
<td>2.5 mA (led off)</td>
</tr>
<tr>
<td>Temperature range</td>
<td>-40° to +50°C</td>
<td>-40° to +50°C</td>
<td>-40° to +50°C</td>
<td>-40° to +50°C</td>
<td>-20° to +50°C</td>
</tr>
<tr>
<td>Alarm contact rating</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1 A - 12 V dc</td>
<td>0.1 A - 28 V dc</td>
</tr>
<tr>
<td>Tamper</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.1 A - 28 V dc</td>
</tr>
</tbody>
</table>
that count!

GS 710 Shock Sensor
Based on proven technology, the GS 710 has been developed to offer an aesthetically superior low profile design with extra features to ease installation.

- Ultrasonically welded inertia head for maximum protection against corrosion
- Damping cylinder absorbs low frequency vibrations
- Gold plated components ensure maximum contact and minimum resistance
- Multi-position terminal block
- Ultrasonically welded inertia head for maximum protection against corrosion

- High quality electrical tamper
- Two spare terminals facilitate wiring
- Optional magnetic contact version

Low frequency background vibrations are ignored

→ Detection Range of Shock Sensors →

Very high frequency noises are ignored
The Complete Package

The GS 600/700 series complies with the essential requirements of the EMC directive 89/336/EMC.