WG1 is a single-zone water leak detection system specifically designed to comply with BREEAM WAT02 monitoring of water consumption and WAT03 major water leak detection criteria.

The WG1 system covers the internal mains cold-water supplies of a building. It is programmable, has an audible alarm, and can identify different flow rates.

The WG1 consists of a control unit, with a display panel, connected to a single turbine water meter with a pre-connected pulse reader. The meter is positioned on the mains cold-water pipe just after it enters the property.

The system operates by monitoring the number of pulses given out by the pulse reader (where 1 pulse equals 10 litres of water). If the pre-set amounts are exceeded, a signal is sent to the WG1 unit which triggers a buzzer and a red warning LED lights up on the control panel. Once activated the buzzer can be silenced, by pressing the mute button on the control panel, but the LED will remain lit until the leak is fixed.

The control unit can be programmed to monitor specific volumes of water, at specific times, which allows it to cater for set occupancy requirements. Parameters can be set in a range from 10 to 32,000 litres of water, in a 30-minute period, and for different days of the week.

Optional latching valves are available to shut off the water supply in the event of a leak

**Typical applications include:** Schools, hospitals, prisons, commercial units, public buildings, office buildings and leisure centres.

---

**Benefits**

- Reduces the impact of internal water leaks that might otherwise be missed.
- Reduces water consumption in buildings.
- Reduces risk of flooding by shutting off water supply.

**Main Features**

- Complies with BREEAM 2014 Section WAT02/WAT03.
- Covers all internal mains water supplies.
- Audio-visual alarms when leak detected.
- Adjustable parameters including water volumes, occupancy periods and days of week.
- Mute button.
| SPECIFICATION                      | WG1 (control unit): 200mm x 150mm x 77mm  
Meters: subject to pipe size |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (W x H x D)</td>
<td>Power supply: 230VAC single phase L.N.E LIVE fused with 20mm, 2A power fuse</td>
</tr>
<tr>
<td>Power supply</td>
<td>Power consumption: &lt;2A</td>
</tr>
</tbody>
</table>
| Alarms                           | Audio - buzzer  
Visual - warning LED (flashing red)                                               |
| IP Rating                         | IP65                                                                            |
| External and internal alarm relay rating | 230VAC, 6A                                                                |
| Reset relay rating               | 230VAC, 2A                                                                     |
| Panel to meter cabling           | Screened 1mm² conductor (pair) up to 500m                                      |
| Panel to latching valve          | 1mm² conductor (pair) up to 100m  
2.5mm² conductor (pair) up to 500m                                                |
| Accreditations                   | CE marked                                                                       |
| Compliance                       | Low Voltage Directive 73/23/EEC  
EMC Directive 89/336/EEC                                                       |
|                                 | BREEAM 2014 Section WAT02 monitoring of water consumption                       |
|                                 | BREEAM 2014 Section WAT03 major water leak detection                           |
| Product code                     | WG1                                                                             |