

## GASSONIC 1701

### Portable Test and Calibration Unit



### Features

- Traceable and calibrated to international standards
- Tests full dynamic range as well as delay function in Gassonic detectors
- Onsite calibration of Gassonic Observer /Surveyor
- Approved for use in hazardous areas

### Benefits

- Provides clear evidence that the detector always has the same detection coverage thereby ensuring reliability
- Only one instrument for all regular tests which eases maintenance
- No need to open up detector or remove parts in the field
- No need for special work permit prior to use

### Description

The Gassonic 1701 is a portable test and calibration unit used to verify the operation and calibrate certain Gassonic ultrasonic gas leak detectors.

Although the Gassonic detectors do not require regular maintenance, the Gassonic 1701 can be used to satisfy the requirements for regular plant maintenance. Compared to traditional detection methods, a calibration gas is not needed for testing the functionality of the devices. Further, the Gassonic 1701 requires no electrical connection to the gas leak detector but is simply placed over the sensor head of the gas leak detector.

To simulate the distinct ultrasound made by pressurized gas leaks, the Gassonic 1701 generates an amplitude sweep of band-limited white noise through a water resistant piezo loudspeaker. When the gas leak detector registers this noise, an optical link in the Gassonic 1701 interacts with the detector and controls the test and the calibration sequence.

### Test Function

The test function in the Gassonic 1701 is for regular testing of the Gassonic detectors. In test mode, the Gassonic 1701 emits a constant calibrated sound that the ultrasonic gas leak detector responds to.

On the Gassonic Observer, the sound level emitted from the Gassonic 1701 appears on the display of the detector and on the Gassonic Surveyor, the sound level reads out on the Gassonic 1701.

### Calibration Function

The Gassonic Observer and Gassonic Surveyor can be re-calibrated onsite. When calibrating the detectors, the portable test and calibration unit emits a series of ultrasonic sound levels at different amplitudes. It then automatically performs a zero and a span calibration of the detector. The calibration of the Gassonic detectors should only be done when the test function shows the detector accuracy is outside its specifications.

### Delay Test Function

During the delay test function, a constant sound level is emitted from the Gassonic 1701. The purpose of this function is to test the Gassonic ultrasonic gas leak detectors after they have been installed with either the built-in delay function enabled or an external delay function. The Gassonic 1701 delay test function permits users to verify the complete signal transmission from the detector head into the fire and gas panel or the DCS system.



# GASSONIC 1701

## System Specifications

- Instrument Type:** Portable test and calibration unit for Gassonic ultrasonic detectors
- Accuracy:** ± 1dB within the sensitivity range of the Gassonic ultrasonic gas leak detectors (44 to 104 dB)
- Approvals:** ATEX, CE, C-UL
- Warranty:** 2 years

## Electrical Specifications

- Battery type:** Rechargeable NiMH battery pack
- Battery Life:** 10 hours of full operation without backlight
- 5 hours of full operation with backlight
- Standby state: approximately 2 months
- Low battery indicator in display
- Charging Requirements:** Fast charging current: 650 mA for 2 hours
- Electrical Classification:** ATEX: II2G EEx ib IIC T3  
C-UL: Class I, Div 1
- EMC Emission:** EN 50081-1 (1992) Generic emission standard. Part 1: Residential, commercial and light industry
- EN 50081-2 (1993) Generic emission standard. Part 2: Industrial environment
- EMC Immunity:** EN 50082-1 (1997) Generic immunity standard. Part 1: Residential, commercial and light industry
- EN 61000-6-2 (1999)

## Mechanical Specifications

- Dimensions Instrument:** Height: 6.81 inch (173 mm)
- Width: 4.13 inch (105 mm)
- Depth: 4.53 inch (115 mm)
- Weight: 3.53 lbs (1.6 kg)
- Suitcase:** Height: 6.81 inch (173 mm)
- Width: 17.79 inch (452 mm)
- Depth: 12.79 inch (325 mm)
- Weight (including Gassonic 1701 and accessories): 15 lbs (6.8 kg)

## Environmental Specifications

- Temperature:** Operating temperature: +5 to 122°F (-15 to +50°C)
- Storage temperature: -4 to +140°F (-20 to 60°C)

*Specifications subject to change without notice.*

*Represented by:*



[www.gassonic.com](http://www.gassonic.com)  
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