

# Performance Target Verification Kit

## PTV-01

**The PTV-01 provides an accurate method to test both functionality and performance of the Incus ultrasonic gas detectors.**

The Incus is an omni-directional airborne leak detector that responds to pressurised gas leaks. These detectors complement traditional gas detection methods used in refineries, gas plants and offshore installations.

Ultrasonic gas detectors are the only type of hazard (fire or gas) detection product where the performance target set out in the installation safety case can be verified meaningfully and safely. The PTV-01 generates a *burst release* which represents the ultrasound expected in the event of an incident. No more than four tests should be needed to verify the total detection envelope.

## Operation

The PTV-01 is set up in direct vicinity of the potential gas leak source, for example, next to a vulnerable gas valve. The pressure in the release volume of the PTV is set to the same pressure as would be typically found in the valve. An orifice of the required release hole size is fitted into the release nozzle of the PTV-01. The size of the orifice will have been determined by the gas leak size you are looking for.

Once all is set up a volume of pressurized gas is released through the PTV-01 orifice and the initial *burst* ultrasound is generated. This is detected by the Incus in the vicinity of the valve generated.

Through this test it is confirmed that the UGLDs in the area will detect and alarm at or below minimum required gas leak rate.

Only the initial *burst* is measured, as by necessity the PTV-01 only contains a small volume of gas, unlike a process pipe.



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### Note:

*When shipping gas cylinders, please ensure local regulations are adhered to.*

## Features

- Accurate testing of ultrasonic gas leak detectors.
- The PTV-01 is portable and can be used by a single person.
- Inert gas release simulates worse case hazardous event.

## Technical Details

- Approx dimensions 530 (W)
- Weight 45 kg (99.2 lb)

## Kit Contains

2 x 10 litre cylinder nitrogen gas at 150 BAR; high pressure gas regulator; two meter high pressure hose; high pressure valve with pressure gauge and test nozzle; and transportation trolley.

[www.Emerson.com/RosemountFlameGasDetection](http://www.Emerson.com/RosemountFlameGasDetection)



[YouTube.com/user/RosemountMeasurement](https://www.youtube.com/user/RosemountMeasurement)



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