

Ultra Pro

Ultrasound Imaging
For Gas Leak Detection



Applications

- ◆ Predictive maintenance of high-availability plants
- ◆ Urgent leak searches on assets
- ◆ Inspections prior and after planned maintenance activities
- ◆ Routine checks for toxic or explosive gases
- ◆ Cost-effective maintenance of systems using atmospheric gases (compressed air, nitrogen, argon...)

Features

- ◆ Pinpoint leaks of any gas in real-time
- ◆ Inspect from a safe distance of up to 50 m
- ◆ Take pictures and videos of detected leaks
- ◆ Real-time leak rate estimation to set priorities
- ◆ Integrated reporting system

Description

The ultrasound camera Ultra Pro uses 124 integrated microphones to locate ultrasound emitted by leaks of all types of gases and vacuum. The sound source location is indicated in real-time on an integrated screen. Pictures and videos can be recorded and integrated in digital reports with DISTRAN Audalytics.

Technology

At the core of Ultra Pro are the multiple sensing elements included in its head. When a sound wave hits the surface of the device, it reaches the elements at times that differ of less than a millisecond. These little time differences are processed by the device in real-time to display the location of the sound sources.

Specifications

Detected gases	All compressed gases incl. air, vacuum, steam
Working distance	From: 0.3 - 100 m (12 in - 160 ft) Typical: 1 - 6 m (3 ft - 20 ft)
Lower limit of detection	Quiet environment 2 L/h (0.1 ft ³ /h) Industrial environment 10 L/h (0.4 ft ³ /h)
Pressure difference	Min. 50 mbar (0.7 psi)
Detection method	Acoustic imaging using 124 ultrasound sensors
Acoustic angle of view	180°
Optical angle of view	110°
Weight	1.5 kg (3.3 lb)
Angular detection accuracy	< 1°
Battery life (1 spare incl.)	5 hours (2.5h x 2 batteries)
Ultra Pro X (ATEX option) <i>Intrinsically safe</i>	II 3G Ex ic IIC T5 Gc II 3D Ex ic IIIC T100°C Dc Tamb= -10°C to 40°C
Temperature range	-10°C to 50°C (10°F to 122°F)
Integrated LED lights	1400 lumens, dimmable
Output format	JPEG and AVI
Data export	Audalytics or SD card
Input methods	Button and touchscreen
Wireless modules	Wifi 802.11 b/g/n



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