

## PORTABLE ULTRASOUND LEAK DETECTOR

### LeakTector LT3 / LT3-EX

### General Description

LeakTector is a portable gas or steam leak detector, designed for periodical survey of steam traps and valves. It detects abnormal vibrations on rotary machines, as well.

When a gas or steam leak is produced through an orifice, or through a valve, the high speed of the gas or steam generates a sound of high frequency (ultrasound), which is not audible by the human ear. This ultrasound is captured and analyzed by the Leaktector microprocessor and finally shown its result on the LCD display.

The system is integrated by two components: probe and analyzer.

A novelty of LeakTector is its special verification function of thermodynamic steam traps, allowing the evaluation of the low energetic efficiency states (cycle too short) of this type of steam traps.

### Operation

The device operation is extremely easy. It includes only one multifunction button and a turn on/off switch. The multifunction button allows selecting the sensitivity of the analyzer, which can be selected among six different ranges:

1. LP: High sensitivity, for low pressure (>15 psig and < 50 psig).
2. MP: Medium sensitivity, for median pressure (>50 psig and < 250 psig).
3. HP: Low sensitivity, for high pressure (> 250 psig).
4. TD Specific function for Thermodynamic steam traps.

### Application

- Steam trap survey.
- Gas and steam leaks detection.
- Vibration detection in rotary machines.



### Included Accesories

- Transport pocket.
- TrapHelp (steam trap survey software (limited to 500 records)).

### Optional Accesories

1. Battery charger (only when LT3 / LT3-EX is supplied with rechargeable battery)
2. Interchangeable directional probe. Directional probe is used for gas leak detection at distance of 5 to 10 mt. without touching the source of leakage. Unaccessible gas leak is detected by pointing the directional probe to the leakage source. Size of directional probe is similar to size of the contact probe.

### Batteries

The LT-3 can be delivered with two different types of batteries:

1. Rechargeable Li-HM battery:
  - 1 x 9 VCC (PP3/6LF22, 9 V, 260 mAh).
  - Continuous live: 87 hours (backlight off).
2. Non rechargeable Alkaline battery:
  - 1 x 9 VCC (PP3/6F22, 9V, 550 mAh).
  - Continuous live: 183 hours (backlight off).

It is strongerly suggested the option of rechargeable batteries plus charger to avoid remove cover of LT3.

### LT3/LT3-EX Technical Specifications

Enclosure	Size	Body	95x80x45 mm (3.74x3.15x1.77 in)	
		Probe	Ø 25x140 mm (Ø 0.98x5.51 in)	
	Weight	275 g (0.61 lbs)		
	Material	Analyzer	High Density ABS	
		Probe Body	ABS	
Protection	Probe Head	Aluminium		
Sensors	Ultrasound	Type	Piezoelectric	
		Frequency	40 KHz ± 1KHz	
		Sensitivity	-80dB/V/µbar	
Operating Range	Voltage	5 to 9 V		
	Recommended Sample Range	Low Pressure	15 < P < 50 psig	
		Medium Pressure	50 < P < 250 psig	
		High Pressure	P > 250 psig	
Humidity	0 to 99% RH, non-condensing			
Power Consumption	Sleep	< 0.5 mA		
	Active	< 3 mA		
	Backlight On	80 mA		
Certification	ATEX <sup>(1)</sup>	Expedient	LOM10ATEX2063 X	
		Marking	II 1G Ex ia IIC T4 - 20 < Ta < 60 °C	
	CE Marking	According with ATEX directive (2014/68/EU)		

(1) For the ATEX Certified LT3-EX only FullWatt 8.4 V 260 mAh Ni-MH battery can be used



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