

Manhole Leak Detection by

Rovanco®



- 3G / 4G
- UL Approved
- Lithium Ion Battery

**Imagine having a maintenance person in every
manhole, pit, basement and utilidor... 24 hours a day!**

Manhole Failure Causes...

- Flooding from heavy rain
- Sump pump failure
- Pipe corroding or failure
- Fire from heat build-up, electrical short, cable overheating
- Illegal removal of manhole covers
- Salt and water build up with electrical lines

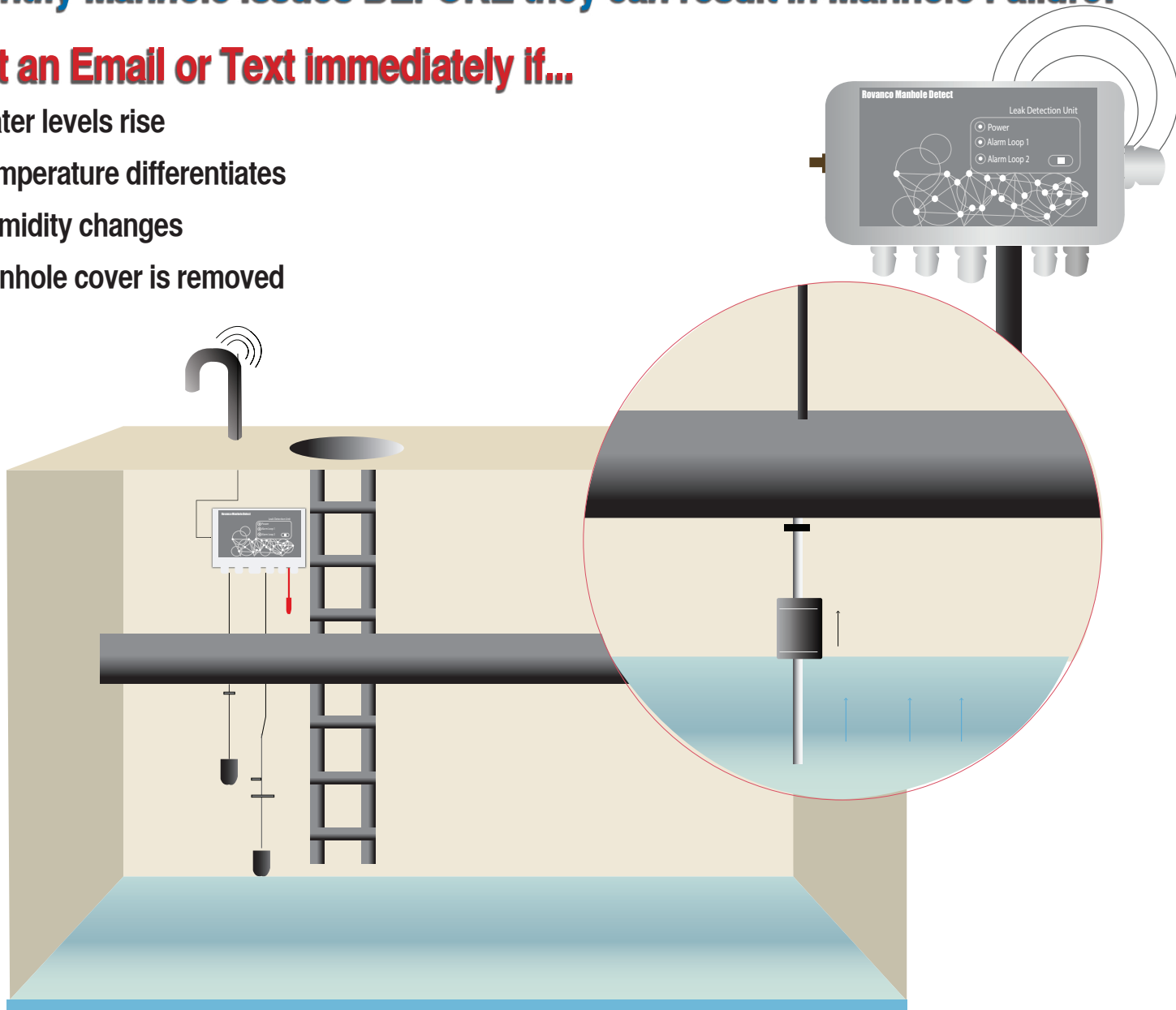


What if ALL these potentially Catastro

The Rovanco Manhole Leak Detection Unit is the Ultimate Solution. Identify Manhole Issues BEFORE they can result in Manhole Failure!

Get an Email or Text immediately if...

- Water levels rise
- Temperature differentiates
- Humidity changes
- Manhole cover is removed





Manhole Failure Can Result In...

- Loss of service
- Expensive repairs
- Dangerous situations
- Destruction of fiber optics, wiring & cables
- Potential terrorist activity
- Steam pipe breaches, expansion joint and vent failure
- Unauthorized entry leading to injury, burns or even death
- Potential lawsuits

Phobic Situations could be Prevented?

The Rovanco Manhole Leak Detection Unit Capabilities

- Measures – humidity and water levels as well as ambient, water, sewage and steam temperatures
- Temperature gauge can distinguish between rainfall and water/steam from a broken pipe
- Humidity gauge sense when a steam trap fails
- Monitors air space in Rovanco Conduit System and informs you if an exterior or interior leak
- Decreases maintenance cost
- Owner can get the FULL life out of a conduit system
- Detects removal or opening of the manhole cover
- Box can withstand 185°F, but components can take over 300°F

The Rovanco Manhole Leak Detection Unit Features

- GPS coordinates are programmed in unit, so it can be viewed using Google Earth™
- Equipped with a lithium ion battery which will last for five years when sending one burst of information per day
- Constant monitoring of battery life
- UL listed box and battery pack
- Manhole mapping of your system
- Dashboard website and app
- Data collecting for energy usage
- Can turn on a redundant sump through your iphone
- 5 year cellular service plan included



Unit can be mounted inside manhole



Unit can be mounted externally (remote monitoring)

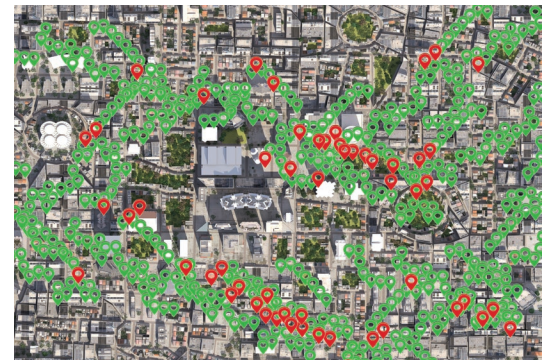


Image above is an example of what monitoring might look like using Google Earth™

Welcome to the Future of Leak Detection!

WiDetect A1e Basic Specifications

- Monitoring unit for registration of water levels, humidity, temperatures, etc in chambers and for detection of moisture in insulated pipes.
- 12 inputs in order to measure room temperature, humidity, flow and return water temperatures in media pipes and water levels in chambers and other wet rooms.
- Unit has four wakeup inputs for activation of level switches and/or temperature switches.
- WiDetect A1e is equipped with a LAN-module or GPRS modem which deliver measurement values to the XTool Monitoring Software.
- The unit is delivered configured for battery operation or for external transformer operation.
- Unit is 3G/4G and UL approved.

Communication / Alarm Function

- WiDetect A1e is a modem alarm unit developed with the latest technology. All models have built-in LAN interface and are at delivery prepared for this type of communication.
- It is possible to set alarms on all analog and digital measurements.
- Communication method for the alarm is GPRS or LAN.
- Alerts can be sent via SMS and email to the mobile phone or a computer.

Real Time Clock

- The real time clock (RTC) keeps the current calendar time. Calendar time allows the unit to know when measurements are made according to established schedules. The time can be read and modified using commands in the protocol.

External Program Memory

- A serial EEPROM memory stores measurement values before future transfer to XTool. The memory has a capacity that will store more than 1,000 measurements.

Power Supply

- The A1e is normally power supplied by 12v DC via an outer transformer. The transformer will primarily be run with 100-240 VAC, 50-60 Hz.
- Power can also be supplied by an integrated battery pack with Lithium Ion cells of type SAFT LSH20, Li-SOC12 which is an environmentally friendly alternative with very low self-discharge.
- The battery operation time is up to 8 years during typical operating conditions.
- Two power supply options, battery or hard wired.

WiDetect A1e Technical Specifications

Unit

Dashboard Software
Water Leak Detection
Steam Leak Detection
Oil Leak Detection
Analog / Digital Inputs

Communication

Broadband
GPRS
Fiber Optic

Power Supply

Primary – Battery Pack / 12v DC
Secondary – 24v DC

Protection Class

External Steel Case
External Insulated Steel Case or External H-20 Case (optional)

Measurement

Insulation Resistance – (1kohm - 1 Mohm)
Alarm Limit Activating – Manually or from Software
Loop Resistance – (0 - 200 ohm)
Adjustable Alarm Limits

Battery

Voltage – (-0.5v - +0.5v)

Rovanco Piping Systems, Inc.

20535 S.E. Frontage Road
Joliet, IL 60431
(815) 741-6700
Fax (815) 741-4229
www.rovanco.com
marketing@rovanco.com

A1e Manhole Detection Unit is manufactured for Rovanco by Wideco Sweden

© 2017 Rovanco Piping Systems, Inc.