Mobile natural gas leak detection
Find the leak fast, no matter where it is
Introducing ABB’s ABB Ability™ mobile gas leak detection system
Natural gas leak detection system

Fast, accurate, cost effective. The better vehicle–based survey solution.

Features
• identify more leaks with higher reliability
• perform surveys fast – data can be reported while driving at 55 mph
• distinguish between pipeline gas and all other methane sources
• reduce cost, improve efficiency
• create electronic compliance records available anywhere immediately
• evergreen analytical software continuously adds new ABB Ability™ features and capabilities

Solve your leak detection challenges
Traditional leak detection processes do not meet today’s demands for fast, accurate and transparent data. Utilities, as well as gas transmission and distribution companies, face increased challenges with pipeline monitoring and compliance due to:
• aging infrastructure
• regulatory pressure to improve system integrity
• desire to reduce greenhouse gas emissions
• reliance on time consuming, error prone paper based monitoring systems
• pressure to reduce cost
• need for data transparency

ABB’s new natural gas leak detection system (ABB Ability™ mobile gas leak detection system) directly addresses all of these challenges using patented cavity–enhanced laser–based technology.

Did you know? A vehicle–based solution surveys 10–25x more area per hour than traditional methods.
Advantages of ABB Ability™ mobile gas leak detection systems

The ABB Ability™ mobile gas leak detection system uses ABB's patented laser–based technique which is more than 1000 times more sensitive than older, less sensitive, legacy methods. This enables unambiguous identification of leaks several hundred feet away from the source.

• high reliability – measures both methane & ethane to eliminate false positives
• save time – begin finding leaks within 2 minutes after power on (competitive laser methods either require 30–45 minutes to warm up or are far less sensitive)
• less maintenance – unlike other laser methods, ABB's patented technology is far more robust and can be fully serviced anytime, anywhere, by anyone.
• lower operating cost – customer owns the instrument and all data
• transparent – data available everywhere immediately through cloud–based reporting

How it works

ABB Ability™ mobile gas leak detection system consists of ABB's LGR methane/ethane analyzer, a GPS, a sonic anemometer and proprietary leak detection software that presents real–time geospatial maps of multiple gas concentrations in real time.

The software's sophisticated leak detection algorithm combines the system's measurements of multiple gas concentrations (CH₄, C₂H₆), local coordinates (GPS) and local wind velocity (sonic anemometer) to estimate the location and size of the leak. This reduces the time necessary to prioritize and pinpoint a leak, increasing safety and lowering emissions.

Readings are stored in the device and can be transmitted in real–time to the cloud for centralized monitoring.

Did you know? ABB’s natural gas leak detection system is a single purchase – a much lower ownership cost than the lease–based solutions of other suppliers.