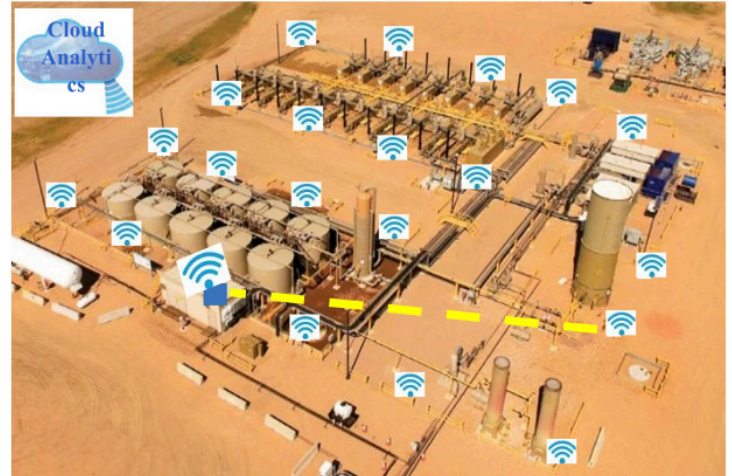# MethaneTrack™

The lowest-cost, turn-key solution for continuous monitoring of Methane emissions

NevadaNano's MethaneTrack™ system is a comprehensive solution that provides low cost, continuous measurement and quantification of natural gas (methane) emissions to enable rapid abatement.   Utilizing an Industrial IoT (IIoT) network of monitoring points to detect methane in the air, the system detects fugitive and operational emissions from a site and immediately alerts the operator to the location and volume of the emissions, allowing rapid response and repair. Automated, continuous monitoring can enable up to 99% reduction in emissions while reducing operational costs and boosting profits.

Sensor layout optimized for the needs of each site

MethaneTrack™ : Features & Benefits

All-weather continuous monitoring: 24/7/365

- Enables up to 99% reduction in emissions
  - Operational in minutes
  - Intuitive user interface – displays all current events and tracks emissions and goals.
  - Automated operation – no manual monitoring required

- Identifies the leak sources and quantifies the emissions

- Provides automated alerts

- Prioritizes the largest leaks for maximum impact

- Discriminates between operational and fugitive emissions
  - Automatically tracks leak reduction statistics

- Real-time, accurate and defensible performance metrics
  - Integrates with asset management software

- Enables predictive analytics and optimization of preventative maintenance programs
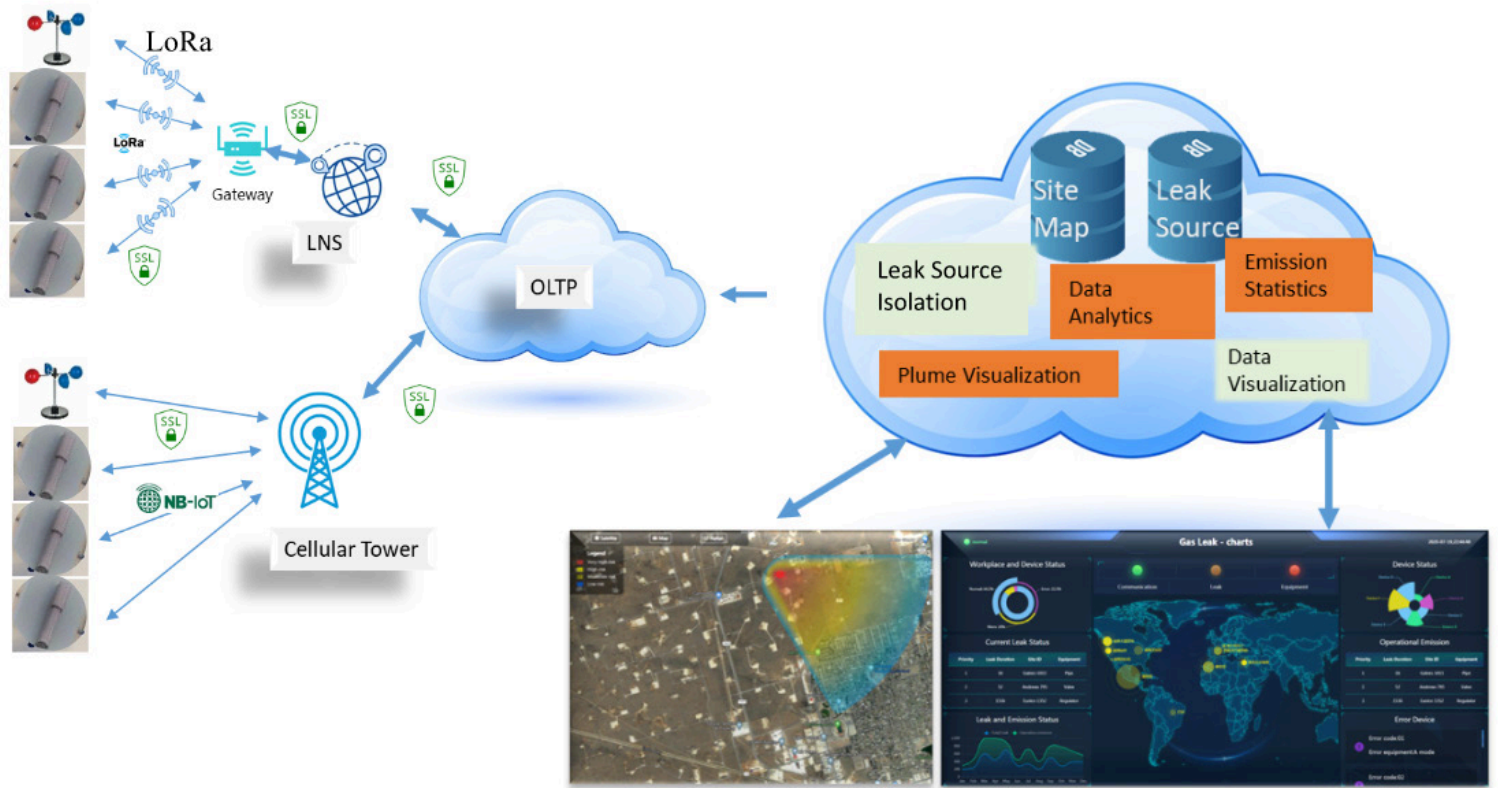
Reduces leak detection costs.
Increases profits.
Lowest total cost of ownership.

- Low initial cost outlay

- 5+ year maintenance free operation
  - Battery replacement after 5 years

- 10+ years life on the sensor

- No sensor calibration required – for life!

- Immune to poisoning.

- Near-zero false positives
  - Wide environmental operating range

- -40 - 75 deg C, 0 - 100% RH

- Accurate across entire environmental range
  - Intrinsically safe

- Global approvals: ATEX, UKEX, UL etc

MethaneTrack™ : System Overview

Secure, cloud-based software to monitor worldwide assets and emissions real time.

MethaneTrack™ : System Description

- IIoT Sensor Array
    - Battery powered with wireless, encrypted LoRa data transmission
    - Rapid installation and provisioning
    - Fully certified for safety (pending)
    - Strategic placement based on site map

- Typical installation:
    - Upstream ~ 5 per well,
    - 20 per compressor station
    - Midstream and Downstream
        - based on site layout and objectives

- Anemometer
    - Time synchronized data with sensors
- Gateway for data transmission to cloud
- Secure Cloud for Data Analysis
    - Compatible with all clouds including private
    - Calculation of leak location and size
    - Identification of operational venting vs. leaks
- Data presentation to customer in preferred format
    - Integration into Asset Management System if desired