

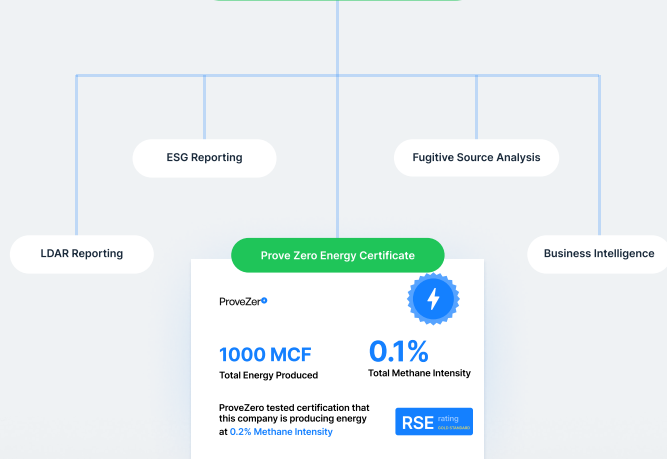
**0000a Approved OGI Camera**

CleanConnect.ai and our partner network eliminate CAPEX by offering the OGI camera-as-a-service. They manage the camera & replace it as necessary.

**Gases Detected with OGI Cameras** Filtered at 3.3 Micron

Benzene, Ethanol, Ethylbenzene, Heptane, Hexane, Isoprene, Methanol, MEK, MIBK, Octane, Pentane, 1-Pentene, Toluene, Xylene, Butane, Ethane, Methane, Propane, Ethylene, and Propylene.

**Machine Learning**



# Gas Detection & Quantification

INCLUDED IN  
**Autonomous365.ci**  
Energy AI Suite

## Model Compute Requirements

One OGI at 15 frames per second with a maximum of 25 Pan and Tilt tour locations

### MINIMUM REQUIREMENTS

CPU - 2 Cores  
GPU - 6000MB of VRAM  
RAM - 20GB

## What is the Return on Investment? (ROI)

Clean Connect customers have seen an obtained a ROI from 3x to 10x based on optimization of operational activities and integration into automation systems.

## How does continuous VOC leak detection work?

We use an OGI (optical gas imaging) camera, like the FLIR G300a, and mount it on a pan-tilt unit. This allows us to cover an entire site with one camera on a 360-degree rotation. The OGI camera is controlled by our AI machine model and the raw camera feed is analyzed continually every 30-seconds to detect leaks.

## Do I need to continuously monitor the camera?

No. Like all CleanConnect.ai machine models, its designed to work autonomously. Our motto is "let the AI do the work," that way no one needs to be dedicated to stare at security monitors-ever!

## What is the cost of VOC Gas Leak Detection?

Typically, this depends on scale and license type. If you are bundling the solution we always stack enough value to provide an ROI.

## How does your leak detection system compare to PID sensors (aka "sniffers")?

In many cases, clients tried "sniffer" pilot programs that resulted in too many false positives and false negatives. We have seen both in side-by-side comparison tests as well. The sniffers missed leaks because the wind didn't blow in the right direction (or at all), which led to clients being fined by regulators. The sniffer alerts always have to be confirmed with LDAR teams using OGI cameras. This is NOT the case with our system since we use the same reliable OGI system that your LDAR team uses today to visually detect VOC gas leaks.

## Do you quantify leaks?

Yes. We are constantly training our AI machine models to detect even the smallest leaks. One of our clients gave us access to ground-truth-data so that we could accurately quantify leaks to within 1.2MAE.

## Can you tell the difference between pneumatic events and actual leaks?

Yes. Our AI machine model identifies all leak events and provides a unique ID. We have trained the machine model to recognize a normal event vs. an actual leak. We can examine leaks over time (how long did it leak; what equipment was leaking) so that we can accurately tell the difference and ONLY alert you when there's an actual leak. Our mission is to eliminate all false positives and false negatives