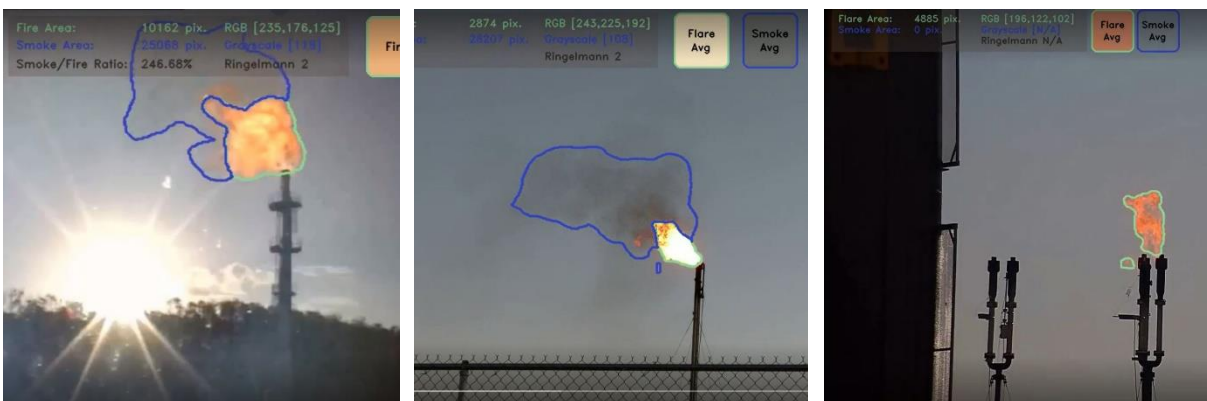


VISIONAERY

Flare Monitoring with VisionAery Essential Device

VisionAery's Flare Monitoring solution with an essential edge device is a cutting-edge computer vision analytic solution designed to provide real-time monitoring and alerting for industrial flare operations. By leveraging sophisticated computer vision technology, our solution continuously monitors various parameters related to flares, including flare size, smoke size, flare color, smoke grayscale, smoke opacity, and the status of the flare pilot light, and the essential edge device makes it easy to install and set up for out-of-the-box flare monitoring at a 1/1 analytic per device ratio.



Flare Monitoring Features & Benefits

Real-time Monitoring

The Flare Monitoring solution watches the flare live, offering instant data and insights about the flare operations.

Black Smoke Detection

Detecting black smoke presence during flaring is a critical capability. Our solution measures smoke size, flare size, opacity, and average color to trigger alerts when black smoke is detected.

Customizability

Customers have the freedom to set customizable thresholds and settings, tailoring the solution to their specific operational requirements.

Intelligent Alerts

Elevate your operational strategy with smart timers and custom alert settings. Set parameters to receive alerts based on the duration and severity of smoke emissions, opacity of the smoke, or flare characteristics to allow you to respond strategically.

Industry Compliance

VisionAery works very hard to stay up to date on the industry compliance requirements around flares. We work hand in hand with the EPA and numerous state and local regulatory committees to keep our solution up to date and continue meeting the compliance requirements set forth by the regulatory bodies on a national and state level.

- We are working with the EPA to create the first alternative testing method for Method 22 that can be done continuously and autonomously using a camera and our flare monitoring analytic.
- We created the first solution that will continuously monitor flares in a 2-hour observation window and allow alerting when the flare has reached 5+ minutes of black smoke output within that 2-hour sliding window. This solution has been approved by regulatory committees such as the TCEQ.

Daily Flare Log Reports

We will send out daily flare log reports to your email that contain the minute by minute or hour by hour flare activity for that day. This makes it easy for you to keep a history of flare behavior in the event of an audit.

Visualization and Historization

To go along with every flare monitoring analytic, we also added a visual based dashboard that allows you to see the flare data from the analytic into a visual graph. These graphs are perfect for any control room monitors as they can easily show trends of flares and any anomalies in real time. You will also be able to store this data for up to 5 years as per the EPA requirements for flares in downstream environments.

Pre-Configured Device Information

Ruggedized Hardware

Run the Flare Monitoring analytic on hardware that is built to endure the toughest conditions for all remote edge applications. All VisionAery equipment is made to run at the true edge, which is local at the site, no matter where it is.

Process Data at the Edge

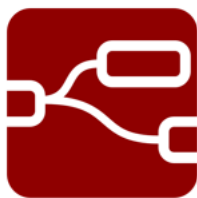
Run analytics locally at the site, and only send back small bits of data, alerts, or reports.

Open-Source Tools

Our options of open-source tools make it easy to integrate and customize your devices to fit your specific company goals for this solution. Below are the tools that will be pre-uploaded.



VisionAery
Analytics



Node Red



Ubuntu OS



Cockpit



EMQX
MQTT
Broker



1TB
Internal
Storage

Pre-Configuration

All VisionAery analytics are configured on the device before it is sent to you. This way there is minimal need to set up the analytic once it is installed.

**Want to Demo this Solution?
Click the link to find an Integrator:**

[Find an Integrator](#)