



# VISIONAERY

## Liquid Leak Detection Spill, Spray, and Vapor

Automate visual detection of spills, sprays, and vapor leaks on your sites with the 100% edge based VisionAery Liquid Leak Detection Application.

### VisionAery Liquid Leak Detection Use Cases

#### **Puddle Detection**

The VisionAery Liquid Leak Detection Application is designed to reliably identify puddles resulting from leaks, such as produced water and crude oil. Our advanced puddle detection feature has been meticulously trained using over 400 hours of real-life leak scenarios, capturing a wide variety of leaks in different weather conditions and terrains from across the country. This extensive training ensures our analytic achieves an exceptionally high detection rate for dependable leak detection, whether it's day or night, rain or shine.

#### **Spray Detection**

At VisionAery, we have seen every type of leak, and we know that high pressure leaks are just as much of a problem as leaks that create puddles.

Spray detection can be added to the base analytic to improve detection capabilities of the liquid leak detection application. When you pair this solution with the puddle detection ability, you double your chances of detecting leaks on your site and significantly reduce time to detection by recognizing the spray before it can puddle.

#### **Vapor Detection**

It wouldn't be a complete liquid leak detection solution if we did not detect the release of liquid gases like CO<sub>2</sub> and Nitrogen. With this add-on analytic, you can visibly detect the presence of leaking liquid gases that refrigerate as they hit the air.

Add this detection ability to all of your liquid gas facilities and rest easy knowing that VisionAery has your back 24/7.

#### **Advanced Alert Filtering**

As with any solution, excessive alerts from false positives can cause alert fatigue and render the application useless. We spent an equal amount of time solving false positive issues as we did building the application to detect liquids. You can easily mitigate false positives with features like warm up and cool down timers, shadow filtering, rate of change parameters on puddle growth and color, and rain mitigation. You can trust that an alert from VisionAery is a reliable source for emergencies.

### Key Features

#### **Raw Data Collection**

- Puddle Detection
- Spray Detection
- Vapor Detection
- Rain Mitigation
- Shadow Filtering
- Warm-Up Timers
- Cool-Down Timers
- Rate of Change for Size
- Rate of Change for Color
- Grayscale Values
- Custom Interest Zones
- Puddle Size Threshold

#### **System Features**

- No Cloud/Internet Needed
- Completely Edge Based
- No Recurring License Fee
- Easy Data Integration
- Native MQTT Data
- Convert to Modbus TCP
- Easy Installation/Set-Up
- Day and Night Monitoring
- 3 Years of Built in Support
- Model Retraining
- RTSP Stream for Analytic View inside of VMS
- VMS Alerting