

# Town of Erie

## AURA OGI© Camera Proposal

**ChampionX LLC** | Emissions Technologies

07 March 2025

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Dear Ben,

On behalf of ChampionX, I am pleased to submit our proposal for the AURA OGI© camera to **Town of Erie**. As a leader in emissions detection technologies with over a century of oilfield services expertise, we are well-positioned to support your emissions detection and monitoring efforts. We share your commitment to deliver energy safely and responsibly.

The AURA OGI© camera combines cutting-edge MidWave InfraRed (MWIR) technology with unmatched precision, efficiency, and ease of use to deliver reliable insights for regulatory compliance, leak detection, or environmental initiatives. ChampionX rigorously tests its technology in diverse conditions, ensuring the AURA OGI© camera meets RFP requirements and achieves exceptional detection performance.

Key Benefits of the AURA OGI© Camera:

- **High-Resolution Imaging:** Detect smaller leaks with precision, thanks to its 4x higher resolution than standard systems.
- **Built-In Smart Routing:** Simplify surveys and onboard new technicians effortlessly, aligning with Appendix K compliance.
- **Metadata Integration:** Streamline regulatory reporting with embedded sensor and location data in every file.
- **Field-Proven Durability:** Robust design, supported by ChampionX's comprehensive training and quick-replacement program, ensures uptime and operational reliability.

ChampionX is not just a technology provider but a trusted partner. We work closely with our clients to understand their challenges, offering tailored solutions backed by our in-basin support and dedicated expertise.

Thank you for considering ChampionX Emissions Technologies. We look forward to the opportunity to work together and help you achieve your emissions reduction goals.

Sincerely,

**Madie Kilcrease**

Sales Associate II

ChampionX Emissions Technologies

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ABOUT US

TRUSTED INDUSRTY PARTNER

ChampionX is a global leader in chemistry solutions, artificial lift systems, advanced digital technologies, and emissions management, enabling clients to extract hydrocarbons safely, efficiently, and sustainably. Our cutting-edge solutions enhance production and environmental performance, empowering clients to drive success and excel across their operations.

EMISSIONS TECHNOLOGIES DIVISION

We have established a division that is exclusively focused on supporting clients that face rapidly evolving regulations as well as their own sustainability, and operational efficiency goals. With a keen understanding of the complexities and nuances associated with emissions regulations, and a growing toolbelt of technologies, our Emissions Technologies division is committed to supporting clients in navigating emissions management and the industry effectively. Our approach combines tailored strategies with advanced technologies and ongoing support, ensuring clients meet their emissions monitoring needs, achieve reduction goals, and excel in a regulated industry.

TAILORED SOLUTION APPROACH

ChampionX provides customized emissions monitoring solutions designed to meet each client’s specific needs, assets, goals, and regulatory requirements. By tailoring our approach, we ensure a more effective and precise emissions management strategy. Our solutions enable clients to improve operational efficiency, maintain compliance, and take a proactive role in environmental stewardship. Below are the services and solutions the ChampionX Emissions team uses to create a comprehensive monitoring program for our customers.

PRODUCTS AND SERVICES

- Soofie® Continuous Emissions Monitoring
  - Surveys Fixed Wing Surveys
  - Leak Detection and Repair (LDAR)
- Software & Dashboard Analytics
  - AURA OGI© Camera
  - Drone & Helicopter Surveys

## OPTICAL GAS IMAGING | AURA OGI™

The AURA OGI© camera combines cutting-edge MidWave InfraRed (MWIR) technology with ChampionX's 140+ years of energy industry expertise to provide a reliable, high-performance solution for gas leak detection and documentation. Designed by a pioneer in Optical Gas Imaging technology, the AURA OGI© ensures unparalleled accuracy and efficiency in emissions monitoring.

## Key Benefits:

- **High-Resolution Imaging:** Captures images with 4x the resolution of standard systems, enabling operators to detect smaller leaks with greater precision.
- **Built-In Smart Routes and Navigation:** Simplifies and standardizes surveys, making leak detection and documentation faster, more consistent, and easier to onboard new technicians.
- **Integrated Metadata Encoding:** Automatically embeds onboard sensor and location metadata directly into image files, streamlining compliance, auditability, and reporting processes.
- **Engineered for Compliance and Connectivity:** Supports regulatory requirements with features designed to meet rigorous standards, including smart routing for Appendix K compliance. Cloud connectivity options ensure seamless access to data for informed decision-making.
- **Reliable and Operator-Friendly:** Built for field conditions, the AURA OGI© is robust, user-friendly, and supported by ChampionX's comprehensive training, in-basin support, and quick replacement program to minimize downtime.

The AURA OGI© camera delivers industry-leading performance to help operators meet emissions monitoring goals efficiently and accurately. Whether for regulatory compliance, LDAR programs, or environmental initiatives, the AURA OGI© is a trusted solution to ensure safety, operational excellence, and environmental stewardship.

## CAMERA FEATURES & CAPABILITIES

### Mid-Wave Infrared Camera

Detects hydrocarbon gases with precision

### HD Visible Light Camera

Captures high-resolution images and videos to complement MWIR data

### Rangefinder

Ensures operators maintain optimal calibration distance, enhancing accuracy and reliability during leak detection surveys

### Background Temperature Sensor:

Advanced temperature sensing to improve image quality

### Remote Viewing Tablet

Full bidirectional remote control and monitoring of the AURA OGI® camera

- Samsung® Industrial C1D2 touchscreen tablet.

### NUC Temperature Selection

Adapts to environmental temperature changes

### Gas Enhancement Mode

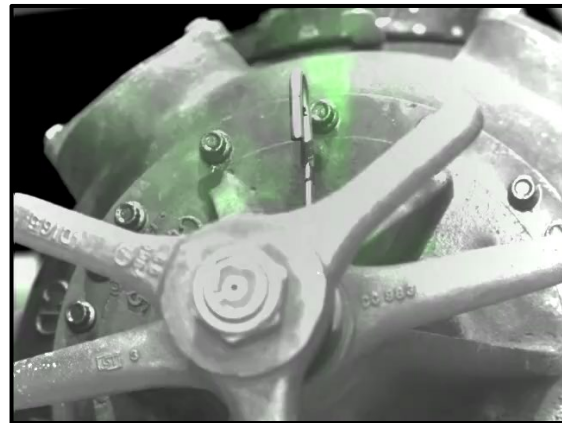
Enables clear visualization of gas leaks, with green highlighted plumes.

### Camera Select (EO/MWIR):

Allows for seamless switching between MWIR and EO modes.

**Rotary Encoder:** Enhances image quality by allowing precise adjustments to brightness and contrast, across varying lighting conditions.

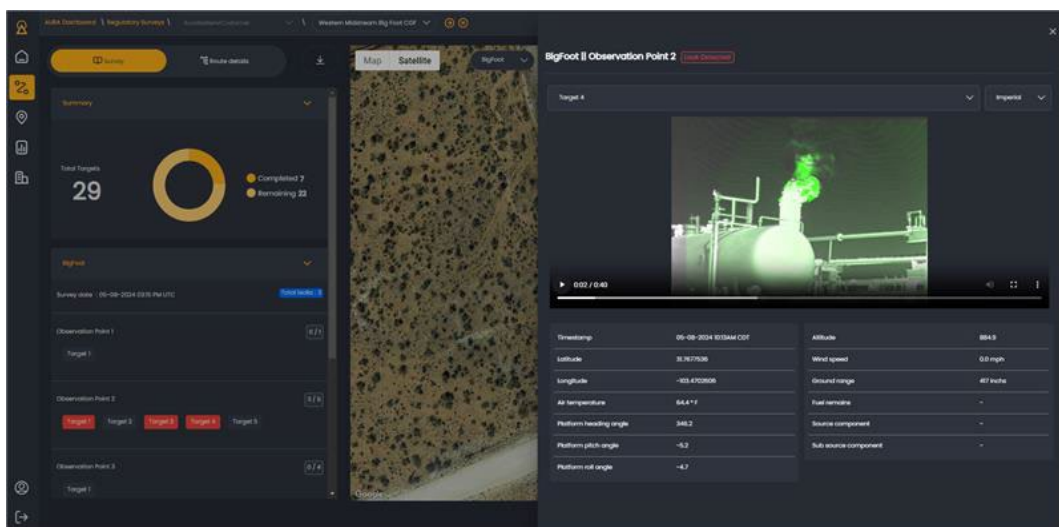
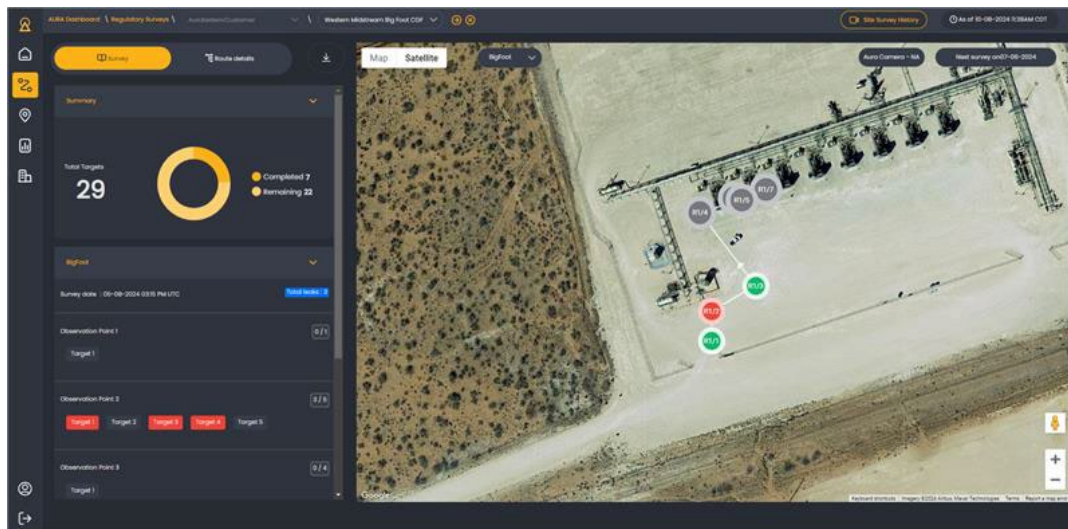
**Mode Select:** Simplifies operations offerings tailored modes for operations, training, and system adjustments.



## AURA DIGITAL DASHBOARD

- Access regulatory and voluntary survey data in a centralized location to confirm detected leaks and monitor repair timelines
- View and download survey images, videos and metadata directly to your device
- Integrate your survey data into your ERP system seamlessly
- Bulk upload all your sites to the dashboard

*Routing and targeting data storage dashboard example:*



## AURA TECHNICAL SPECIFICATIONS

ATTRIBUTE	AURA OGI
MWIR Resolution (H x V / Pixels)	640 x 512 / 327,680
Viewfinder Resolution (H x V)	1280 x 1024
Screen / Tablet Resolution (size / pixels)	8": 1920 x 1200 Wireless Tablet
EO Camera Resolution	1920 x 1200 (2.3MP)
Country of Origin	USA
MWIR Lens	25mm manual focus
Optional Bayonet mount Lens	Yes: 50mm optional
Rangefinder (Max Range / Accuracy)	131' / 1" @ 16'
Background Temp Measurement	Yes: Non-Thermometric
Metadata Encoding on video	Yes: Frame level (MISB 0601.8)
GPS	Yes: GNSS -RTK/ IMU
External Communications	Wi-Fi
Environmental Ingress Rating	IP.54
Weight	6.6 lbs.
Size (L x H x W)	13" x 6.26" x 5.2"

## AURA COMPLETE PACKAGE





## PRICING

### CAMERA ONLY

PURCHASE CHECKLIST	PN	ITEM	CONTENTS	UNITS	UNIT PRICE (USD)	TOTAL PRICE (USD)
<input type="checkbox"/>	1900001	AURA OGI© Kit	AURA OGI© MWIR Camera	1	\$112,000	\$112,000
			Neck Strap	1		
			Hand Strap	1		
			Travel Case	1		
			25MM Lens	1		
			AURA OGI© Battery	2		
			3 Bay Charger	1		
			Android Tablet	1		
					<b>TOTAL (USD)</b>	<b>\$112,000</b>

### CAMERA WITH RTK AND ANEMOMETER

PURCHASE CHECKLIST	PN	ITEM	CONTENTS	UNITS	UNIT PRICE (USD)	TOTAL PRICE (USD)
<input type="checkbox"/>	1900001	AURA OGI© Kit	AURA OGI© MWIR Camera	1	\$112,000	\$112,000
			Neck Strap	1		
			Hand Strap	1		
			Travel Case	1		
			25MM Lens	1		
			AURA OGI© Battery	2		
			3 Bay Charger	1		
			Android Tablet	1		
<input type="checkbox"/>	1900209	RTK	RTK/LORA Base Station	1	\$2,500	\$2,500
<input type="checkbox"/>	1900211	ANE	Anemometer	1	\$1,500	\$1,500
					<b>TOTAL (USD)</b>	<b>\$116,000</b>



**SUBSCRIPTION SERVICES**

<b>PURCHASE CHECKLIST</b>	<b>PN</b>	<b>ITEM</b>	<b>CONTENTS</b>	<b>UNIT OF MEASURE</b>	<b>PRICE PER MONTH (USD)</b>
<input type="checkbox"/>		Routing	Tracking and logging of paths for inspections	Per month/camera	\$250
<input type="checkbox"/>		Targeting	Identification of target for OGI Inspections	Per month/camera	\$250
				<b>TOTAL (USD)</b>	<b>\$ 0</b>

**ADDITIONAL / SPARE PARTS**

<b>PURCHASE CHECKLIST</b>	<b>PN</b>	<b>ITEM</b>	<b>CONTENTS</b>	<b>UNITS</b>	<b>UNIT PRICE (USD)</b>	<b>TOTAL PRICE (USD)</b>
<input type="checkbox"/>	1900208	50MM	50mm MWIR Lens, F1.5, manual focus	0	\$14,000	\$14,000
<input type="checkbox"/>	1900070	Straps	Hand and Neck Straps	0	\$513	\$513
<input type="checkbox"/>	1900144	PDA	Class1/Div2 Android Tablet	0	\$3,955	\$3,955
<input type="checkbox"/>	1900207	Battery	AURA OGI© Battery	0	\$475	\$475
					<b>TOTAL (USD)</b>	<b>\$ 0</b>

**SHIPPING**

<b>PURCHASE CHECKLIST</b>	<b>PN</b>	<b>ITEM</b>	<b>CONTENTS</b>	<b>UNITS</b>	<b>UNIT PRICE (USD)</b>	<b>TOTAL PRICE (USD)</b>
<input checked="" type="checkbox"/>	1900303	Shipping for AURA OGI©	(Required)	1	\$950	\$950
					<b>TOTAL (USD)</b>	<b>\$950</b>