

Illuminating & Safeguarding What Matters



Reyal™ Fuel Integrity Program

Empowering, customizable, enforceable.

Reyal is a complete product authentication & assurance platform. Built for brands & governments, who want unquestionable physical confidence in their products & supply chains.



- Increase tax revenue
- Easy to use with minimal sample preparation
- Engineered against adulteration
- End-to-end verification, all fuels, all equipment
- Short lead time
- Negligible downstream disruption during rollout
- Compliance to national fuel standards
- Resistance to laundering interference



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Reyal™

Fuel Integrity

Product Authentication
 Track & Trace
 Supply Chain Integrity

The Reyalm Solution

Designed for broad types of environments & form factors, the only in-fuel end-to-end verification solution in the market that quantifies emerging fuel blends with no change to the fuel’s appearance or performance. Empower your nation or organization to control your supply chain integrity, secured by product authentication & material tracing.



R1F Reader

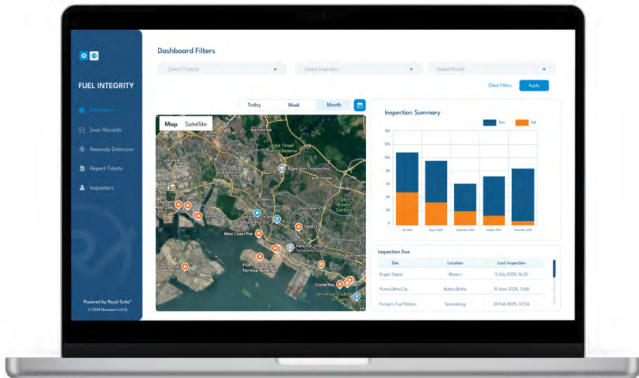
Field-deployable high-definition optical reader, unbound by limitations of a central laboratory.

- **Central-lab-grade fidelity.** Remote measurement meets rigorous standards, required for evidentiary court proceedings.
- **Quantitative analysis.** Answers beyond a yes or no result, ensuring both a confident & robust national program.
- **Rugged & portable.** Easy to deploy over a wide territory & environments.

Reyal Signature™ Markers

Proprietary library of quantifiable, harmless covert markers.

- **No impact on fuel performance.** Does not alter fuel properties, resulting in identical performance.
- **High solubility & homogeneity.** Easily blends with fuels, either by manual or automated injection.
- **No additional environment impact.** Contains the same elements as fuels without metals or halogens.



Reyal Data Suite

Monitors & tracks data from all registered readers, across areas, regions & countries seamlessly, live.

- **Multilevel oversight assessment.** Actionable intelligence, granting tailored access to enforcement metrics, across key stakeholders.
- **GPS-based testing integrity.** Ties each sample to verified time & location, preventing phantom testing & deliberate manipulation.
- **Immutable chain of custody.** Create traceable evidence that cannot be altered or fabricated from collection to courtroom.



SOLUTION HIGHLIGHTS

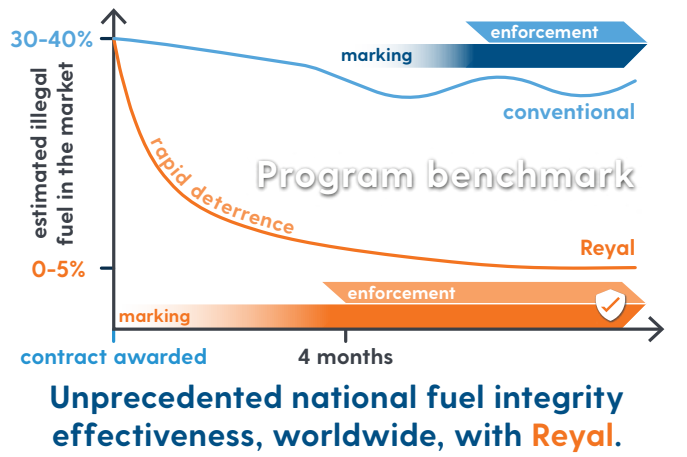
- ✓ **Supply chain assurance, secured by in-product authentication.** End-to-end verification, built for every fuel & every interface.
- ✓ **Safeguard fuels against mixing.** Minimize contamination & subsidy abuse for compliance with national economic priorities.
- ✓ **Remote, on-site testing.** Real-time sample measurement & analysis, directly at retail stations, terminals, trucks & ships.
- ✓ **All-season operation.** Suitable for a wide variety of operating & testing environments.
- ✓ **Covert labeling, overt monitoring** The fuel marking platform embeds covert fingerprints, enabling transparent field verification of fuel authenticity to combat illicit trade.

CASE HIGHLIGHTS

Country X, Central Asia, 2024-2025

Within 6 months of Reyalm™ program introduction, 34% increases in both domestic fuel declarations & direct tax revenue, > USD \$40M.

2020-2023: 1.8B L 2024-2025: > 2.5B L



Addressing Vulnerabilities, End to End

