

DETECTORS

Specialist Walk-Through Copper & Gold Detector for Mining and Customs

Specialist walk-through detector engineered to identify trace quantities of non-ferrous metals — including copper wiring and gold ore — at mining exit points, smelter gates, and customs checkpoints, without triggering on common steel items.



[Walk Through Copper & Gold Detector](#)

[Official Brochure](#)

SOLUTION SNAPSHOT

<p>TARGET METALS</p> <p>Cu, Au, Ag, Pt (configurable)</p>	<p>DETECTION SENSITIVITY</p> <p>Down to 5 g copper equivalent</p>	<p>DISCRIMINATION</p> <p>Ferrous / non-ferrous selective</p>
<p>THROUGHPUT</p> <p>Up to 40 persons/min</p>	<p>DISPLAY</p> <p>10" industrial touchscreen</p>	

Built for Real Operations

01

Uses a multi-frequency induction system calibrated specifically to the conductivity signatures of copper, gold, and silver alloys. Unlike standard metal detectors, the platform can be programmed to ignore steel belt buckles and work tools while remaining highly sensitive to non-ferrous theft attempts — a critical capability for mineral processing facilities and precious-metal handling environments.

APPLICATIONS

Where This Product Fits

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Mining & Mineral Processing

Prevents theft of copper wire, gold concentrate, and ore samples at mine exit gates and shift-change checkpoints.

Customs & Precious Metal Control

Identifies undeclared precious metals and controlled materials crossing national borders or entering secure vaults.

Recycling & Scrap Facilities

Audits outgoing materials to ensure high-value non-ferrous metals are properly logged and not removed without authorisation.

SPECIFICATION

Technical Details

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Target Metals	Cu, Au, Ag, Pt (configurable)
Detection Sensitivity	Down to 5 g copper equivalent
Discrimination	Ferrous / non-ferrous selective
Throughput	Up to 40 persons/min
Display	10" industrial touchscreen
Frequency Range	Multi-frequency 3–100 kHz
Connectivity	Ethernet / RS-485 / Relay
Power	110–240 V AC
Ingress Protection	IP54 (outdoor ready)
Warranty	3 years hardware

"Copper theft from our site dropped by 85% within two months of deploying this system. The non-ferrous discrimination is remarkably accurate."

Operations Director, West Africa Mining Corp

Head of Loss Prevention

RESOURCES

Media & Questions

Q. Will it false-alarm on workers' steel-toe boots or tools?

A. No. The multi-frequency discrimination engine can be calibrated to ignore common steel items carried by workers. Calibration is done during on-site commissioning.

Q. Is outdoor installation supported?

A. Yes. The IP54-rated housing withstands dust, rain, and direct sunlight, making it suitable for mine portals and outdoor checkpoints.

Q. Can it log and report detection events?

A. Yes. Every alarm event is time-stamped and stored with operator ID. Reports can be exported in CSV or PDF for compliance auditing.

Ready to deploy Walk Through Copper & Gold Detector?

Talk to Nirikhon for product consultation, installation planning, integration support, and enterprise deployment.

Hotline: 01712345678 | Website: www.nirikhon.com