

SPATIAL MAP • SOLUTION 01 / 07

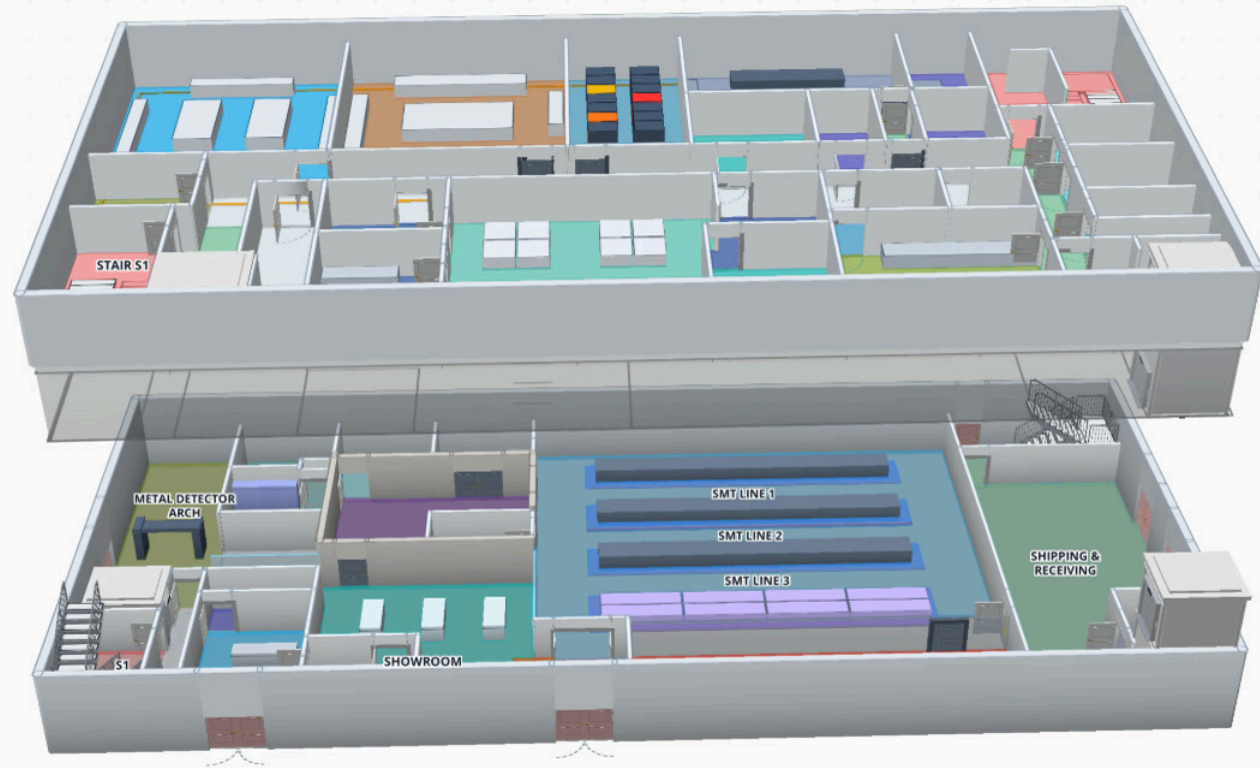


Anti-theft

Stop shrink at the door, not at audit.

EVERY TAG • EVERY GATE • EVERY CAMERA • LIVE

 NORTHGATE ELECTRONICS — ASSEMBLY & SECURE STORE



01 — THE CHALLENGE

Shrink hides in the blind spots.

High-value stock rarely vanishes in one go. A unit leaves by the wrong door, one badge lets two people in, a reel of chips never reconciles on the line — and each is only found at the next count, long after the trail has gone cold.



01

Stock walks out unseen

Count variances surface at audit, long after units have gone.

€23,108

LOST TO MISSING STOCK · 4 INCIDENTS · 30 DAYS



02

Tailgates and forced doors

One badge, two people; secure doors forced open.

21

TAILGATES & FORCED DOORS · 30 DAYS



03

Shrink hidden on the line

High-value chips issued to lines never fully reconcile.

€3,518

OF COMPONENTS UNACCOUNTED · 14 DAYS

AT A GLANCE

2

FLOORS MODELLED

42

SECURITY ZONES

€480,447

HIGH-VALUE STOCK WATCHED

863

UNITS TRACKED BY RFID

217

CONNECTED DEVICES

02 — THE LIVE TWIN

Your site, live in 3D.

📍 NORTHGATE ELECTRONICS · 2 FLOORS

We model your building to scale — SMT lines, test and QC, the secure vault, the finished-goods cage and the docks — and layer every security source on top. Zones, tagged units, cameras, access points and high-value stores share one browser view your security team can open.

Structure

SMT lines, secure vault, finished-goods cage and docks.

Security zones

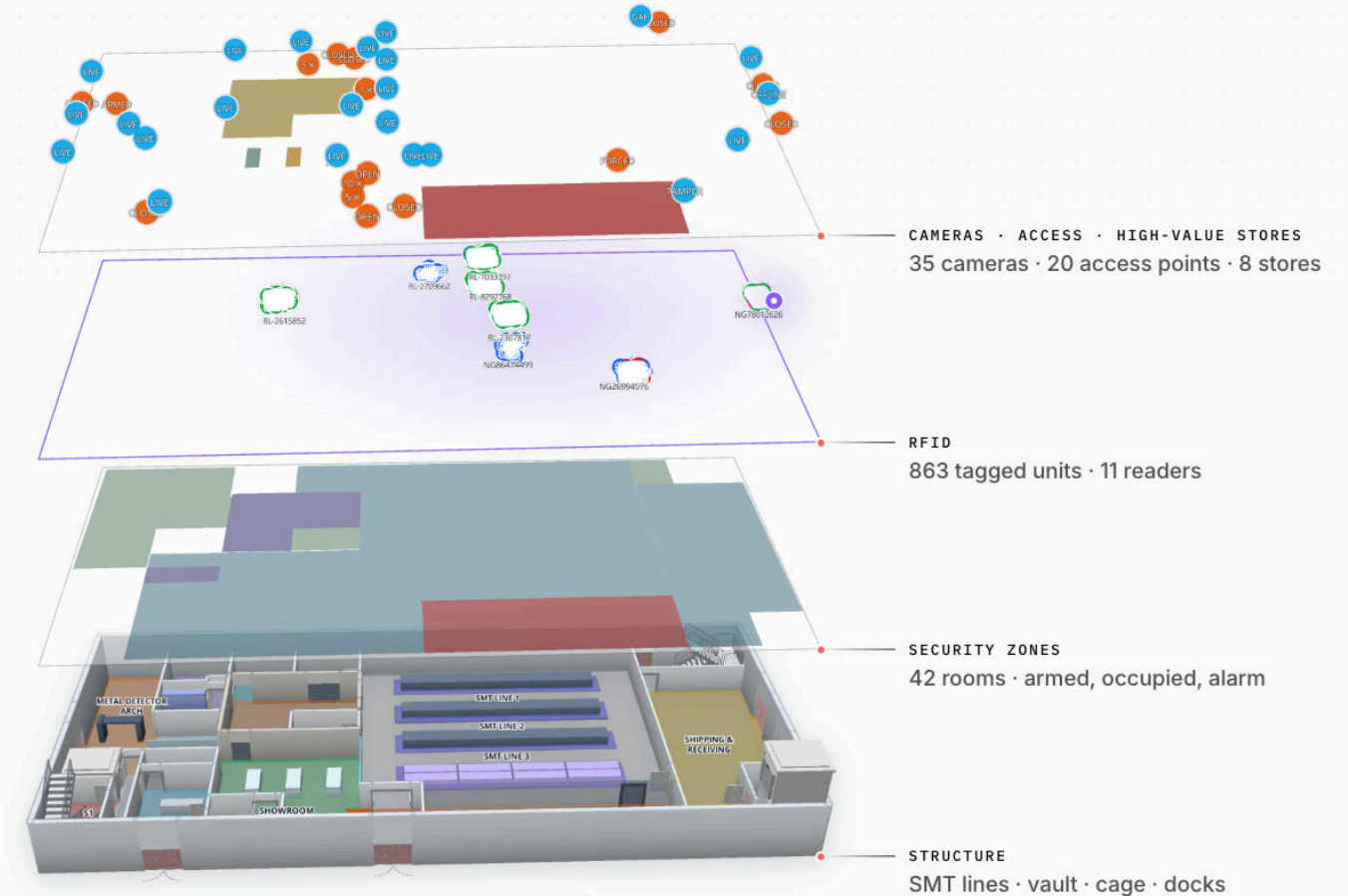
42 rooms tinted live — armed, occupied or in alarm.

RFID

863 tagged units read by 11 readers.

Cameras, access & high-value stores

35 cameras · 20 access points · 8 stores.



2

FLOORS

42

SECURITY ZONES

217

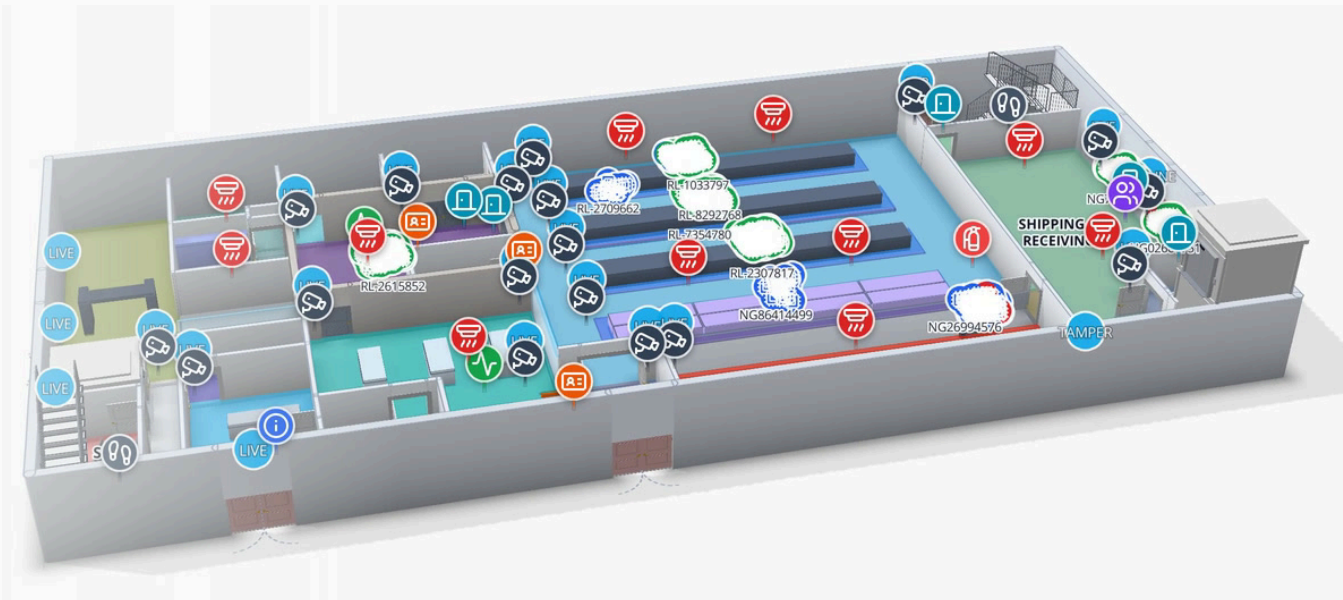
DEVICES

03 - LIVE RFID PLAYBACK

Every unit, moving, live.

📍 NORTHGATE ELECTRONICS · GROUND FLOOR

The twin is not a picture — it is live. Every RFID read moves its unit on the map, and the built-in history player replays any shift, so you can see where stock went, which door it passed and when.



● **CR-G05 · Cage gate** **FORCED**

The finished-goods cage gate reports a forced opening.

● **Badges** **2 OUT OF ZONE**

A contractor and a visitor outside their permitted zones.

● **RFID reads** **99.5% READ OK**

3,127 of 3,143 reads in the last 12 hours.

€480,447

HIGH-VALUE STOCK WATCHED

863

UNITS TRACKED BY RFID

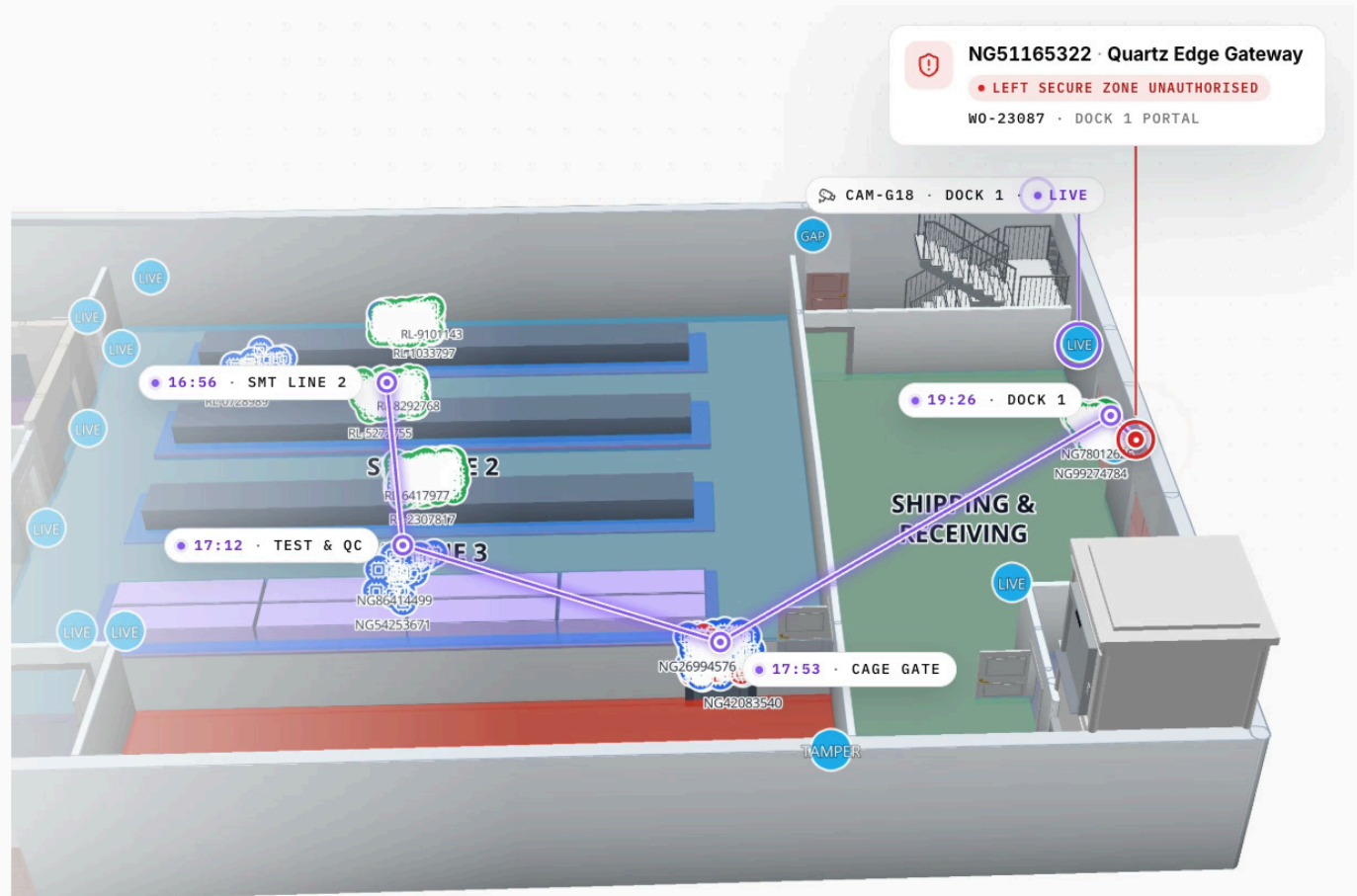
04 — FOLLOW EVERY UNIT

Every unit, reader by reader.

GROUND FLOOR · SMT LINE 2 → DOCK 1

Every RFID read is a timestamped step on the map. Here one finished unit is followed from SMT Line 2 through Test & QC and the cage gate to the Dock 1 portal, where it left the secure zone unauthorised.

- **NG51165322** **UNAUTHORISED EXIT**
Quartz Edge Gateway · WO-23087 · last read at the Dock 1 portal.
- **Read trail** **4 READERS**
SMT Line 2, Test & QC, cage gate, Dock 1 · 16:56 to 19:26.
- **CAM-G18 · Dock 1** **LIVE**
The dock camera, linked to the exception for review.



3,143

RFID READS · 12 H

11

READERS

17

EXCEPTIONS FLAGGED

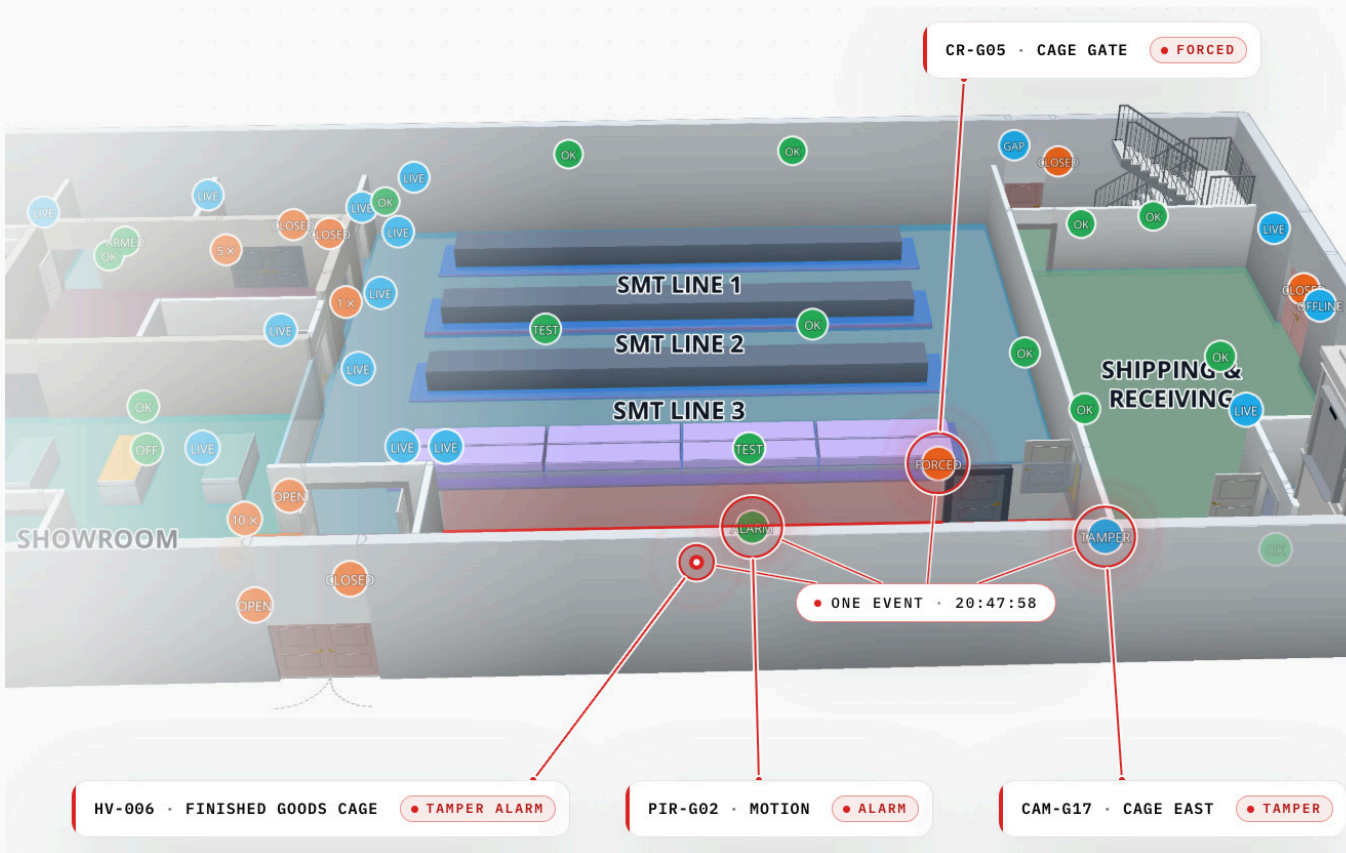
05 - ALARM, PINPOINTED

A forced cage, on the map.

FINISHED GOODS CAGE • GROUND FLOOR

A forced gate, a motion alarm and a tampered camera usually arrive as three alerts in three systems. The twin joins them into one event — same room, same second — beside the stock at risk, so the response starts with the full picture.

- **CR-G05 • Cage gate** **FORCED**
Access point reports the gate forced at 20:47:58.
- **PIR-G02 • Motion** **ALARM**
Motion detected inside the cage in the same second.
- **CAM-G17 • Cage East** **TAMPER**
The camera watching the cage reports tampering.



€215,127

STOCK IN THE CAGE

-€2,824

VARIANCE • -8 UNITS

06 — FIND WHO'S WHERE

Wrong badge, wrong room. Found.

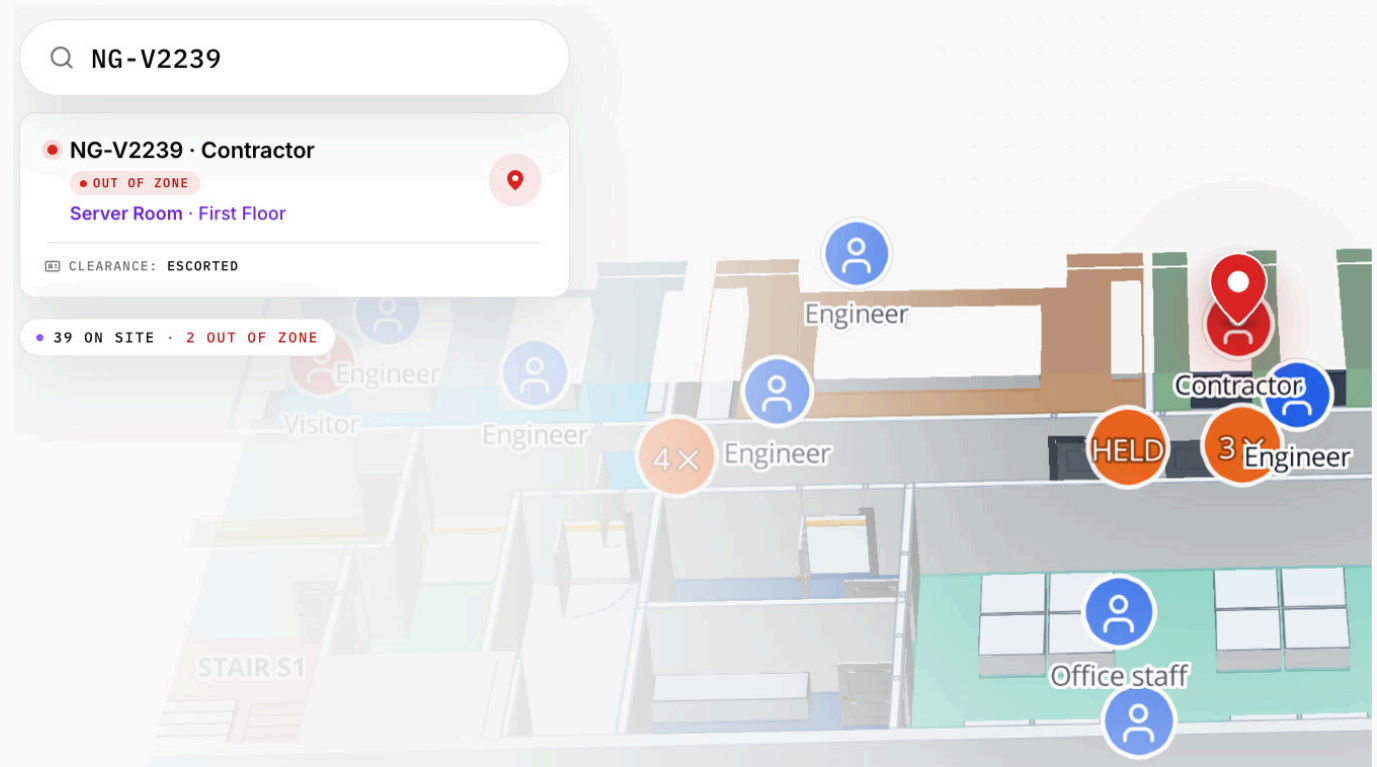
SERVER ROOM • FIRST FLOOR

Search any badge, tag or asset and the twin flies to it. Here a contractor cleared only for escorted access is found in the Server Room — beside a high-value store with an open count variance, and a lab door held open on the same floor.

● **NG-V2239 • Contractor** **OUT OF ZONE**
Server Room · first floor · clearance: escorted.

● **HV-008 • Server Room** **AUDIT VARIANCE**
High-value store with a -€1,378 count variance.

● **CR-F17 • Prototype Lab** **HELD OPEN**
Card-reader door held open for more than 60 seconds.



39

PEOPLE ON SITE

2

OUT OF ZONE

26

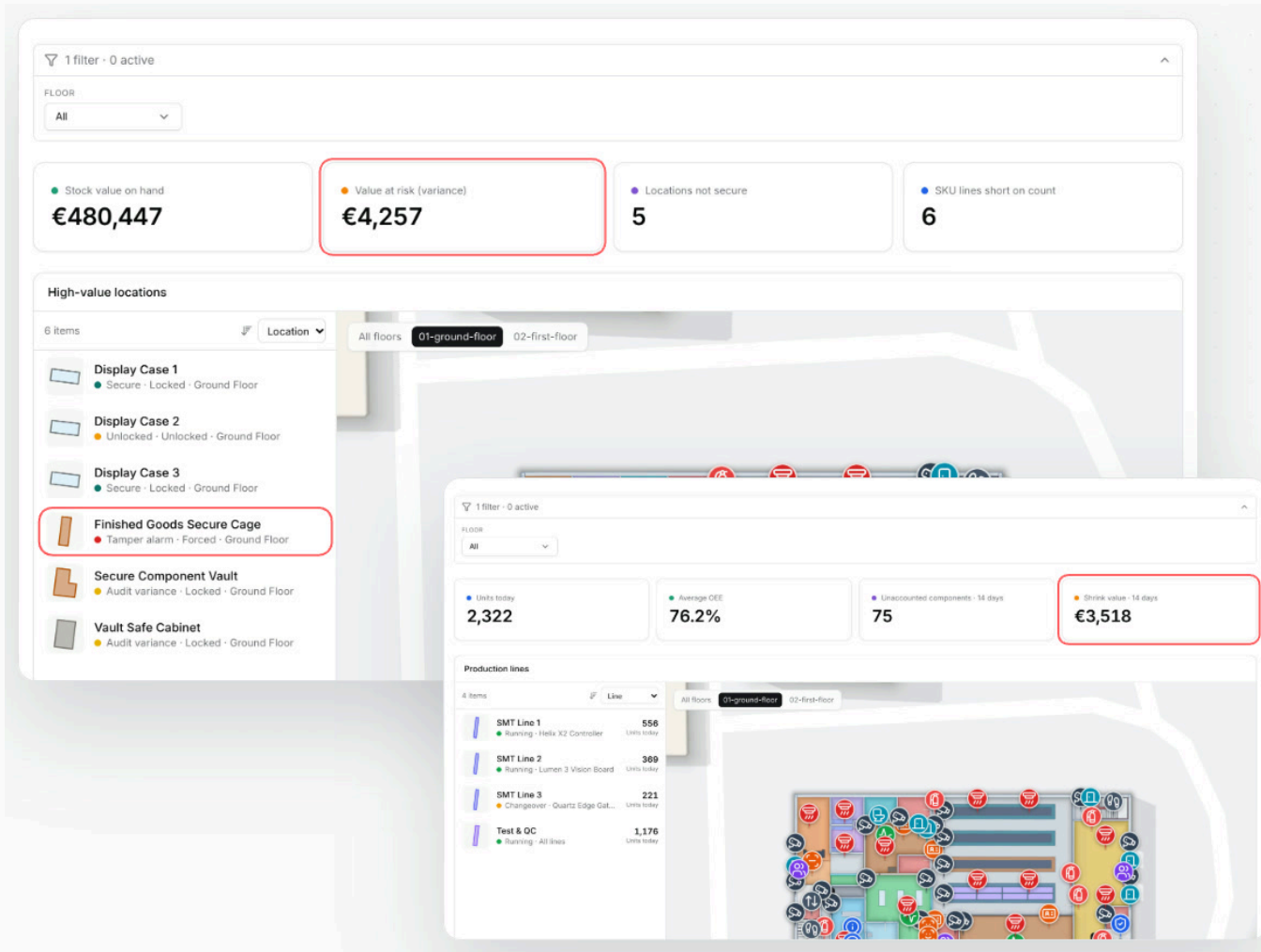
SECURE-ZONE BADGES

— 07 — SHRINK, IN ONE REPORT

Every variance, priced and placed.

Every map layer feeds reports your teams already use — built around your KPIs and ready from day one. Each report keeps its live map, so a variance always leads back to the cage, vault or line it comes from.

- High-Value Stock & Shrink — stock on hand, value at risk, locations not secure, SKU lines short.
- Line Output & Component Shrink — units, OEE and unaccounted components, priced per line.
- SMT Line 2 carries €3,029 of the €3,518 unaccounted — the first place to look.



€4,257

VALUE AT RISK

6

SKU LINES SHORT

€3,518

SHRINK · 14 DAYS

08 - CONNECTED TECHNOLOGY

Connects what you already run.

New RFID, BLE and sensor networks sit alongside the cameras, card readers and alarm sensors you already own. Video, access control and intrusion systems are connected as they are — no rip-and-replace.

217

DEVICES ON ONE MAP

92.2% **863** **3,143**

ONLINE NOW RFID-TAGGED UNITS READS • 12 H



11

RFID readers

LLRP • 4 ANTENNAS EACH



35

CCTV cameras

RTSP / ONVIF



20

Access points

CARD READERS & DOORS • OSDP



40

Intrusion & safety

MOTION, SMOKE • ZIGBEE



58

BLE badges & tags

39 BADGES • 19 TOOL TAGS



11

Gateways

BLE • LORAWAN • MODBUS • LLRP



Connects what you already run

Existing CCTV, card readers and alarm sensors feed the same map as the new RFID readers, badges and tags — each over the protocol it already speaks.

PROTOCOLS

BLE 5.0 Zigbee RTSP / ONVIF LoRaWAN

OSDP LLRP Modbus TCP

WHAT WE DELIVER

Built for your site. Like no other.



Your plant, live in 3D

Both floors, vault to dock, every room mapped.



Every tag on one map

RFID, BLE, badges, cameras and alarms — with playback.



Alarms with location context

Each alarm lands on its room, camera and stock.



Shrink reports teams use

Variance, seals and line shrink, priced per location.



Custom-built, end to end

We integrate your readers, gates, VMS and access control.

HOW WE WORK

1 Discover

We walk your sites with your teams and agree the questions the solution must answer.

2 Model

We build your buildings as a live 3D twin — every floor, room, rack and door, to scale.

3 Connect

We integrate the readers, sensors, cameras and systems you have, and add what is missing.

4 Configure

Alerts, playback and reports are set up around your workflows and KPIs.

5 Run & evolve

We support the solution and extend it as your operation changes.

LET'S MAP YOUR OPERATION

contact@spatialmap.io

spatialmap.io

Tell us about your sites — we design, build and run the solution around them.

