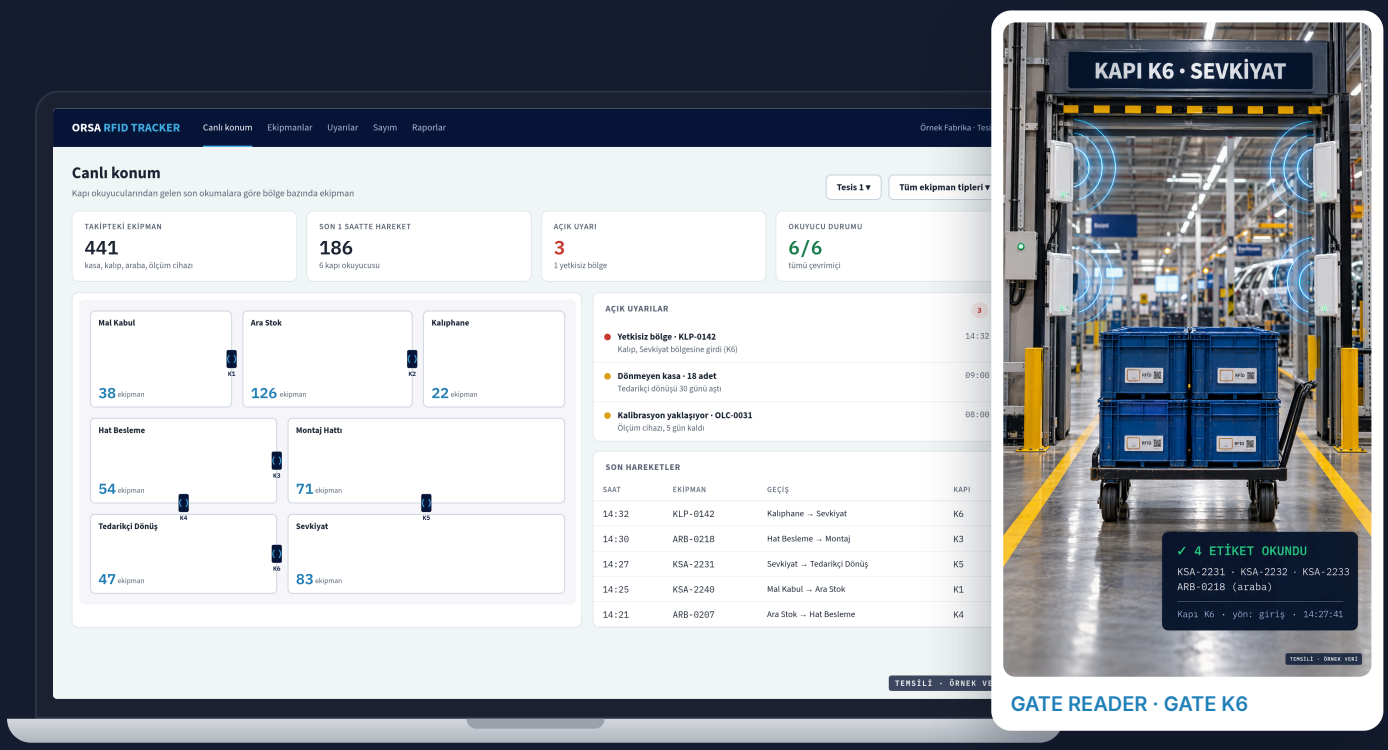
An ORSA AIDC solution

Orsa RFID Tracker

An in-plant monitoring platform **automating equipment and material tracking via RFID**

FOR AUTOMOTIVE PRODUCTION PLANTS

1 Tag — 2 Read — 3 Locate — 4 Warn — 5 Report

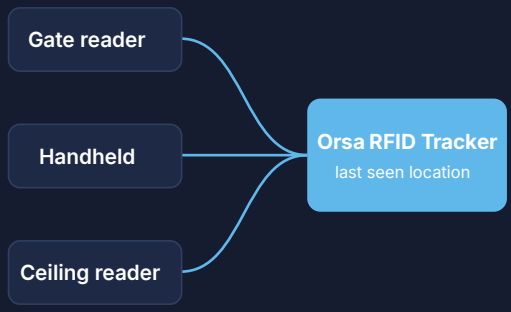


GATE READER · GATE K6

THE PROMISE

Don't guess where your equipment is. Know.

Not knowing where a tote, a mold or a parts cart is costs you the time spent searching for it. Orsa RFID Tracker asks that question of the readers at the gates, not of people.



BENEFITS

What does Orsa RFID Tracker change?

Because barcodes wait to be scanned; RFID is read hands-free.

01 **No one scans anything**
A movement record is created the moment tagged equipment passes a gate. Operators don't stop to hunt for barcodes; missing records no longer depend on people.

02 **Counts take minutes, not hours**
The handheld reads hundreds of tags at once from meters away, without line of sight. Count shelf boxes without taking them down.

03 **You know where lost equipment was last seen**
Every read is a point, every point a time stamp. "Which gate did it last pass, and when?" always has an answer.

04 **Alerts come instantly, not later**
The system notifies you when a mold enters an unauthorized zone, a returnable tote is 30 days overdue from a supplier, or a gauge's calibration is due.

05 **You keep your existing systems**
Orsa RFID Tracker doesn't replace ERP, MES or WMS; it feeds them the "physical reality". Movements are sent via API.

KEY DIFFERENCES

Six core features

865–868 MHz
UHF band valid in Türkiye (ETSI)

No battery
Passive tag, maintenance-free

10 m+
Handheld read range

4 antennas
On one fixed reader, PoE-powered

Seconds
Hundreds of tags read in one scan

Browser
No install required, mobile-ready

HOW IT WORKS

How it works — four layers

1 — 2 — 3 — 4

Tag

Passive UHF RFID tag (EPC Gen2 / ISO 18000-63). No battery needed; it lasts as long as the equipment. On-metal tags for metal surfaces, rugged-encased tags for oily, hot areas. Tags are printed and encoded on site with an RFID printer.

Reader

Fixed readers at gates and passages (PoE, 4 antennas), ceiling readers in open areas, handhelds for counting and searching. Hardware focus is Zebra only; existing Zebra handhelds work with an RFID sled.

Platform

Turns reads into meaningful movements: which equipment, from which zone to which, and when. Zones, rule engine, alerts, counts, assignments and reports run in browser and mobile.

Integration

Movements sent to ERP, MES and WMS via REST API. Equipment lists load from Excel; reports export to Excel.

If a reader goes offline, data is buffered on the device and syncs when it reconnects.
Runs in the browser, no install needed, works on phones and tablets.

COMPARISON

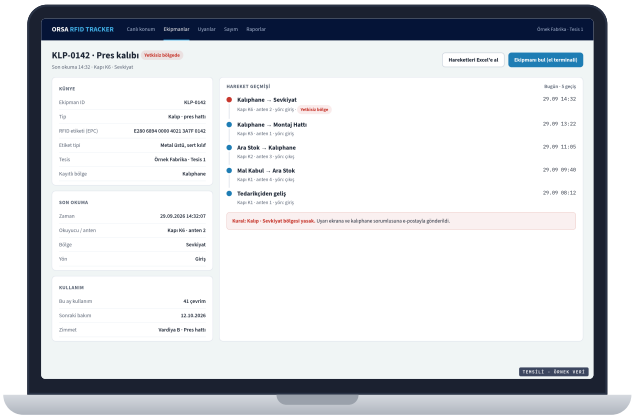
Versus barcodes

	Barcode	With Orsa RFID Tracker
Reads	One by one, line of sight required	✓ **Hundreds of tags at once, no line of sight**
Range	Tens of centimeters	✓ **10 m+ with a handheld; at gates, as items pass**
Human factor	Unscanned moves go unrecorded	✓ **Every gate pass logged automatically**
Count	Per shelf, per box; hours	✓ **Sweep the zone; minutes**
Dirty, oily areas	Labels become unreadable	✓ **Rugged-encased tags stay readable**
Data	One fixed number	✓ **Rewritable, unique per serial**

ON SCREEN

Where and when each item was last seen is on record.

All points passed are listed in time order, with reader, direction and user details.



IN THE FIELD

What Orsa RFID Tracker fixes on site

Returnables & totes (RTI)

Track who holds the totes, pallets and baskets cycling with your suppliers, how many trips they make and where lost ones were last seen.

Molds, jigs & tools

With on-metal tags, the zone location, usage count and maintenance date of molds and fixtures are tracked.

In-plant transport carts – WIP

Parts cart movements between line feed, buffer stock and assembly zones are logged automatically; bottlenecks become visible.

Gauges & assigned gear

Who calibrated gauges, handhelds and tablets are assigned to, and where they are on each shift; the system alerts as calibration dates approach.

Stock and buffer counts

Periodic and spot counts take minutes with a handheld; gaps between system and physical stock are listed instantly.

Shipping gate verification

The gate reader checks loaded totes against the shipping list; missing or wrong loads are caught before the truck leaves.

ORSA RFID TRACKER

Platform features

01 Live location
Each item's zone and last read time; filter by plant and zone.

02 Movement history
Every point passed, in time order; with reader and user details.

03 Rules & alerts
Unauthorized zone, overstay, unreturned tote, calibration; email and on-screen alerts.

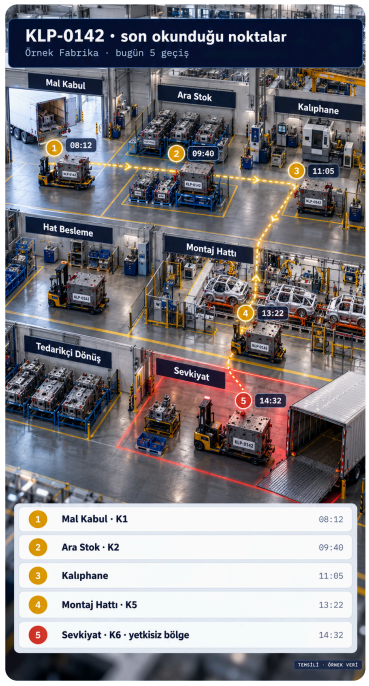
04 Count
Zone-based counts by handheld; expected–found–extra list instantly.

05 Assignment & shift
Equipment assigned to a person or shift; handover and return logged.

06 Reports
Cycle time, loss rate, zone occupancy, usage frequency; Excel and PDF export.

07 Many sites, many firms
Several plants and suppliers on one setup; data separated by company.

08 Roles, audit
Role-based access, who/when log for every change, no hard delete.



ZONE VIEW · KLP-0142

SETUP

Three keys to the right setup

The right tag per asset

Metal surfaces and liquids affect RF signals. In the survey, Orsa picks on-metal, rugged-encased or adhesive tags for each equipment type.

Direction at gates

Antenna layout and reader setup answer "in or out?" at installation; each movement is logged with its direction.

Tag costs that scale

Adhesive tags on cartons, rugged cases on molds. Tag cost is matched to the asset's value, keeping total cost of ownership low.

ROLLOUT

Rollout in three phases

1

Survey

Site walk, equipment types, gates, RF measurement; tags and readers are picked here.

2

Pilot

A single line, gate or equipment group. Read rates are measured on site and rules are tuned.

3

Scale-out

Phased expansion to other zones, ERP/MES link, team training and handover.

> **Pricing is per project: hardware (readers, antennas, tags, printers) + platform license + rollout.** Firm quote after the site survey.

PILOT

Try it on your own site.

Pick an equipment group: totes, molds or transport carts. We tag them, install a reader at one gate and track movements together for two weeks. Decide with real read data.

Request a pilot

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OrsaAI-DC
ACCURATE DATA. CLEAR DIRECTION.

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