SMART TECHNOLOGY SOLUTIONS

# Smart technology. Real solutions.

Field-ready technologies for industrial safety and smart retail.










**01 / SENSE**
Panel risk monitoring

**02 / VISION**
Flame and smoke analysis

**03 / SHELFSYNC**
Electronic shelf labels

AICO ELEKTRONIK

# We connect technology with your operations.

We bring AI, IoT, software and automation together with real operational needs.

AI | IoT | SOFTWARE | AUTOMATION

## 01 We understand your infrastructure.

We analyse your existing infrastructure and define the system architecture that fits your needs.

## 02 We develop hardware and software together.

By handling hardware and software together, we build solutions that truly work in the field.

## 03 We move forward in controlled steps.

We run projects through controlled installation, integration and continuous improvement.

Smarter, measurable and manageable solutions for existing infrastructure.

THREE COMPLETE SOLUTIONS

# The right technology for the right need.

Field-ready technologies for industrial safety and smart retail.

01

## AICO Sense

Early risk detection in electrical panels

PAGES 04—07




02

## AICO Vision

Flame and smoke analysis on existing cameras

PAGES 08—11




03

## AICO ShelfSync

Centrally managed electronic shelf labels

PAGES 12—14



INDUSTRIAL SAFETY

01

# AICO Sense

## Early risk detection in electrical panels.

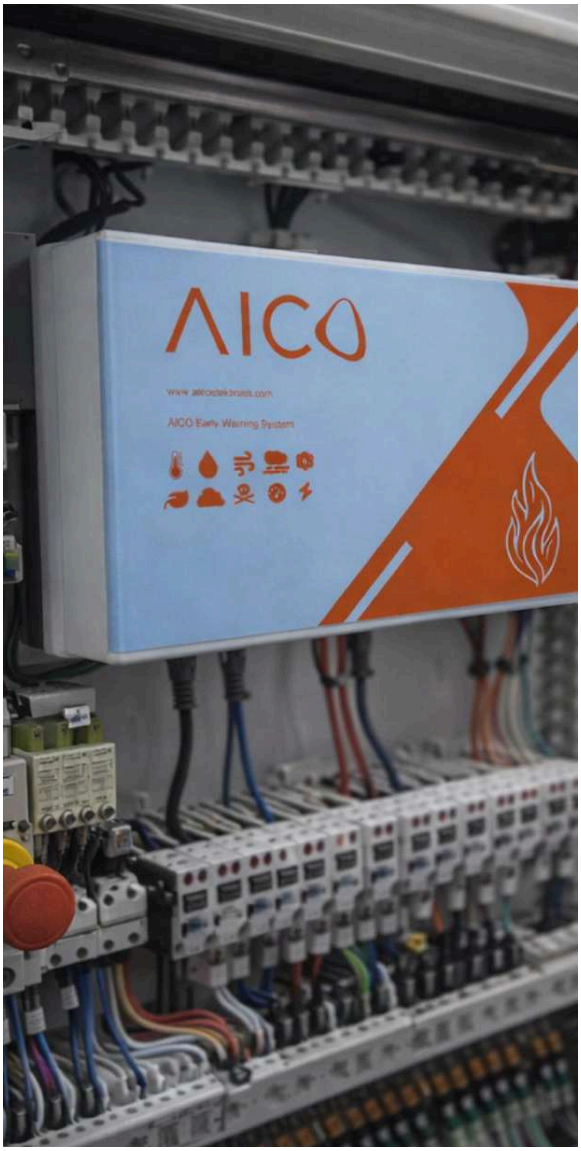



Continuously monitors temperature and environmental data inside the panel and reports unusual changes to the right people.

WATCH FOR CHANGE

# By the time risk is visible, it may be too late.

Support early awareness by regularly monitoring changes in panel conditions.




## Continuous monitoring

Sensor data inside the panel is tracked against defined thresholds.

## Early notification

Unusual changes are reported to the right people, speeding up the inspection process.

## Existing infrastructure

Its compact design integrates neatly into suitable electrical panels.

HOW DOES IT WORK?

# From field data to clear action.

The AICO Sense monitoring flow: data collection, analysis, notification and inspection.

01

## Data collection

Temperature and environmental sensor data inside the panel is monitored.

02

## Analysis

Values are evaluated against defined thresholds and change trends.

03

## Notification

If something unusual happens, the right people are informed.

04

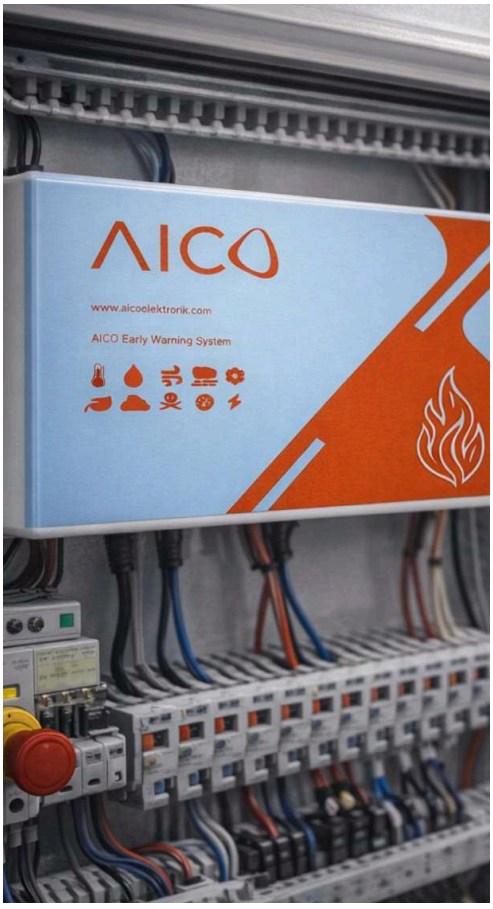
## Inspection

The technical team gets the chance to check the area before a potential problem grows.

DESIGNED FOR THE FIELD

# Compact design. Remote monitoring.

Makes it easier to monitor the operating conditions of electrical panels.




PANEL APPLICATION

Designed for panel applications up to 24 V

DATA COMMUNICATION

Data communication over Wi-Fi

MONITORING

Continuous monitoring of temperature and environment

NOTIFICATION

Notifications at defined thresholds

ENCLOSURE

Compact enclosure and in-panel integration

CONFIGURATION

Monitoring approach configurable to your needs

IMPORTANT POSITIONING

AICO Sense is positioned not as a replacement for mandatory fire detection systems, but as an early risk monitoring solution that supports existing safety and maintenance processes.

AI-POWERED IMAGE ANALYSIS

02

# AICO Vision

Flame and smoke analysis
from existing cameras.




An analysis layer that evaluates footage from existing security cameras in real time.

EXISTING INFRASTRUCTURE, A NEW LAYER

# More insight from your cameras.

AICO Vision evaluates compatible camera streams with flame and smoke analysis.

**Flame + Smoke**

Simultaneous analysis on the same video stream.

### Integration with existing cameras

Works with compatible camera streams, with no new camera investment.

### Analysis during internet outages

Image analysis continues; event data is stored locally.

### Preferred notification channel

The notification method after a detection is chosen per project.

### Separate view for each camera

Flame and smoke probabilities can be monitored per camera.

LIVE MONITORING INTERFACE

# Video and analysis, on one screen.

Camera footage and analysis results are monitored together.




01 **System and connection**

View of system and connection status.

02 **Probability scores**

Flame and smoke probability scores.

03 **Events and time**

Event count and timing per camera.

04 **Analysis status**

Status area showing that analysis is active.

ANALYSIS DEVELOPED IN A REAL ENVIRONMENT

# Image analysis developed in the field.

Evaluated with different camera angles and controlled flame/smoke scenarios.

## 26

## cameras in an active field study

Tests were carried out on the camera system in the building where AICO is based, monitoring a range of different areas.

TEST APPROACH

01 Controlled flame and smoke scenarios

02 Image analysis under different indoor conditions

03 Evaluation of small flame sources such as candles

04 Model improvements to reduce false alarms

Performance is assessed based on the project site, camera placement, image quality and ambient conditions.

SMART RETAIL

# AICO ShelfSync

03

## Shelf information, managed centrally.




An electronic shelf label system that puts price and product information on centrally managed e-ink displays.

MANAGE SHELF INFORMATION CENTRALLY

# One hub. Thousands of shelf labels.

Bring price changes and product information to the store shelf digitally.

01

## E-ink
**display**

Wide viewing angle and low energy consumption.

02

## Remote
**updates**

Manage thousands of labels in seconds.

03

## Up to 7 years
**battery life**

Long operating life, depending on usage conditions.

04

## IP65
**housing**

Water- and dust-resistant build.

05

## 3 colours
**support**

Makes promotions and alerts stand out.

06

## QR / Barcode
**and NFC**

Works with product and verification flows.

Battery life depends on usage conditions. Size and hardware options are finalised according to project scope.

FLEXIBLE DISPLAY OPTIONS

# Choose the right display for your shelf.

Product, price, promotion, stock and verification details can be designed to suit your needs.

## DISPLAY SIZES

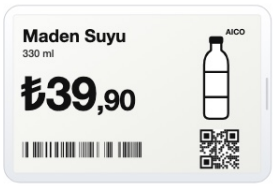
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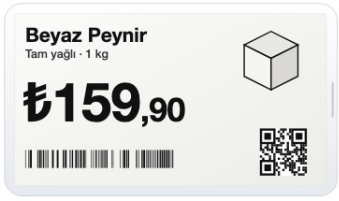

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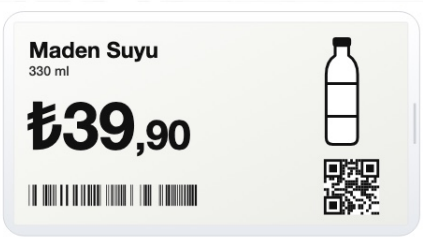



4.2″




## FOUR INFORMATION LAYOUTS

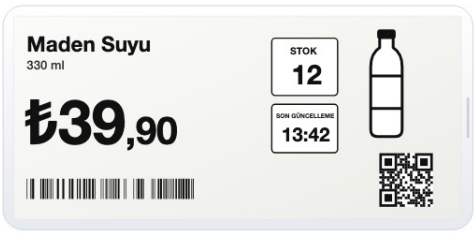
01 / Minimal



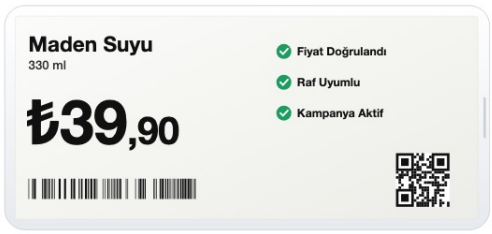

02 / Promotion-focused




03 / Smart shelf




04 / Verification details




Size and hardware options are finalised according to project scope.
Images are not to scale; screen content is for illustration.

AICO ELEKTRONIK PROJECT PROCESS

# From need to scalable solution.

An approach that starts with existing infrastructure and evolves with field data.

01

## Needs analysis

We study your operations and infrastructure.

02

## Project design

We define the right technology and design.

03

## Pilot deployment

We test the solution in a controlled setting.

04

## Integration

We connect it to your existing processes.

05

## Roll-out

We extend the proven solution to new areas.

06

## Continuous improvement

We improve the system with field data.

Let’s define the right starting point for your business together. ↗

LET'S DESIGN THE FUTURE TOGETHER

# Let's design the next step together.

Let's start your company's technological transformation together.

SALES AND PROJECT ENQUIRIES


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AICO Elektronik is a brand of AICO Yazılım ve Tasarım.