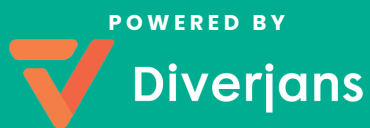


PLASMON CATALOG



www.plasmon.io



WELCOME TO PLASMON!

*“Plasmon – Trust
the Data, Control
the Environment!”*

Plasmon is an IoT (Internet of Things) platform. Sensor-equipped devices produced under the Plasmon brand transmit data such as temperature and humidity to the platform. The platform stores this data, allows downloads in Excel format for any desired date range, displays it graphically, and provides analysis and reporting. Additionally, if specified thresholds are exceeded, notifications can be generated via SMS, email, or a trigger device. The trigger device is a separate unit that provides a 5V dry contact (via relay) to electrically activate different systems. This enables physical electrical triggering. For example, when the temperature exceeds a set value, a connected air conditioner can be activated via the relay, helping maintain the desired temperature range in the environment.

We aim to launch a new service fully integrated with the Plasmon platform called Deviation Margin.



What Do We Do?

With our industrial sensors and smart devices—tested and calibrated for accuracy—we precisely measure and record critical environmental data such as temperature, humidity, and carbon dioxide levels. We provide detailed reports and alert you instantly via SMS, email, or our trigger devices if any of your predefined threshold values are exceeded. This helps you take preventive action before potential risks occur.

Moreover, we equip Plasmon devices with system-integrated barcodes to enable automatic identification and fast setup. This allows you to manage your processes with minimal time loss and maximum efficiency. With our advanced technology, we make your data monitoring reliable, automated, and user-friendly.

Experience

15⁺

Sensor Support

20⁺

24/7 Monitoring

24⁺

Sectors

20⁺



What is Environment Monitoring?

Our devices continuously monitor values like temperature and humidity in environments such as warehouses, production areas, and cold storage rooms. By detecting changes early, they help enhance product and process safety.



Plug & Play Ease of Use

Installation is straightforward. Thanks to the “plug and play” feature, our devices can be activated quickly without requiring technical expertise.



Durable Structure Up to -40°C

Especially suitable for challenging environments like cold storage rooms. Our industrial model operates reliably even in extremely low temperatures.



Wired Sensor Connectivity up to 1200 Meters

You can connect sensors to the device via cables up to 1200 meters long. This allows you to place the device in a secure control room while installing the sensor in a distant warehouse area.



Early Warning Against Abnormal Conditions with Deviation Margin

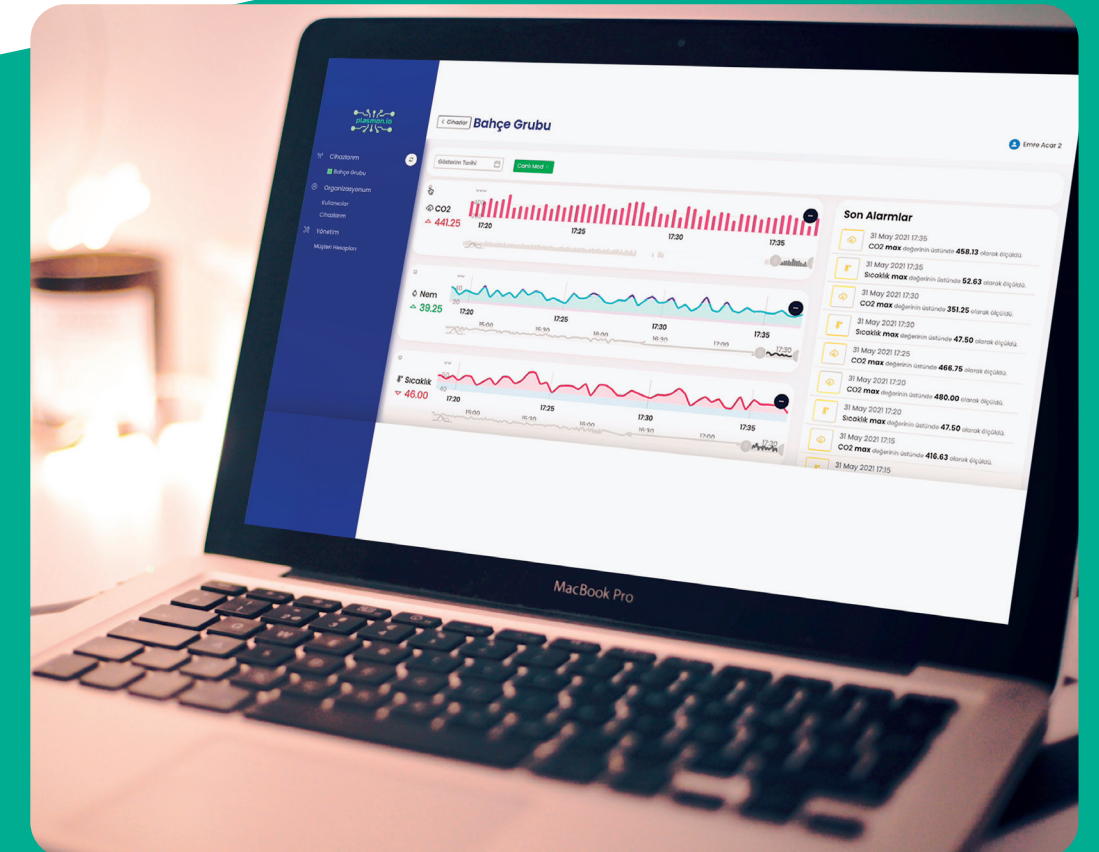
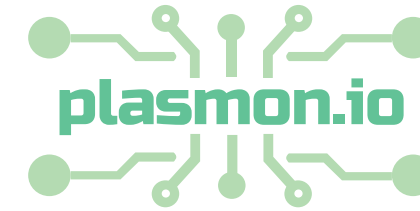
The system detects deviations beyond predefined temperature and humidity limits and notifies you in time.



Automatic Response and Alerts with Trigger Device

When values deviate, audible and visual alerts can be activated. Additionally, climate control systems such as air conditioners or fans can be triggered automatically to restore the environment to optimal levels.

Monitor, Alert, Respond. Don't just track your environmental conditions—take full control.



Sectoral Application



Logistics and Warehousing
Warehouses, Cold Chain
Transport, Sensitive Product
Storage Areas



Production Sector
Production Storage Areas,
Production Areas with OHS
Compliance Obligation,
Laboratories



Energy Sector
Material Warehouses, Server
Rooms, Decision Support
System Rooms



Livestock Sector
Animal farms, feed stores,
product storage areas, Veterinary
Clinics



Food Sector
Cold storage, cold chain
applications, freezers



Greenhouse Sector
Vegetable greenhouses, storage
areas, packaging areas



Health Sector
Hospitals, Medical Centres,
Family Health Centres,
Laboratories, Pharmaceutical
and Medical Storage Areas



Pharmaceutical Sector
Hospitals, Medical Centres, Family
Health Centres, Laboratories,
Pharmaceutical and Medical
Storage Areas



Our Devices & Features

STANDARD KIT

- Cloud connection via Wi-Fi
- Supports up to 5 sensors
- LED screen for real-time measurement display
- 5V power adapter
- Battery backup up to 4 hours

PLUS KIT

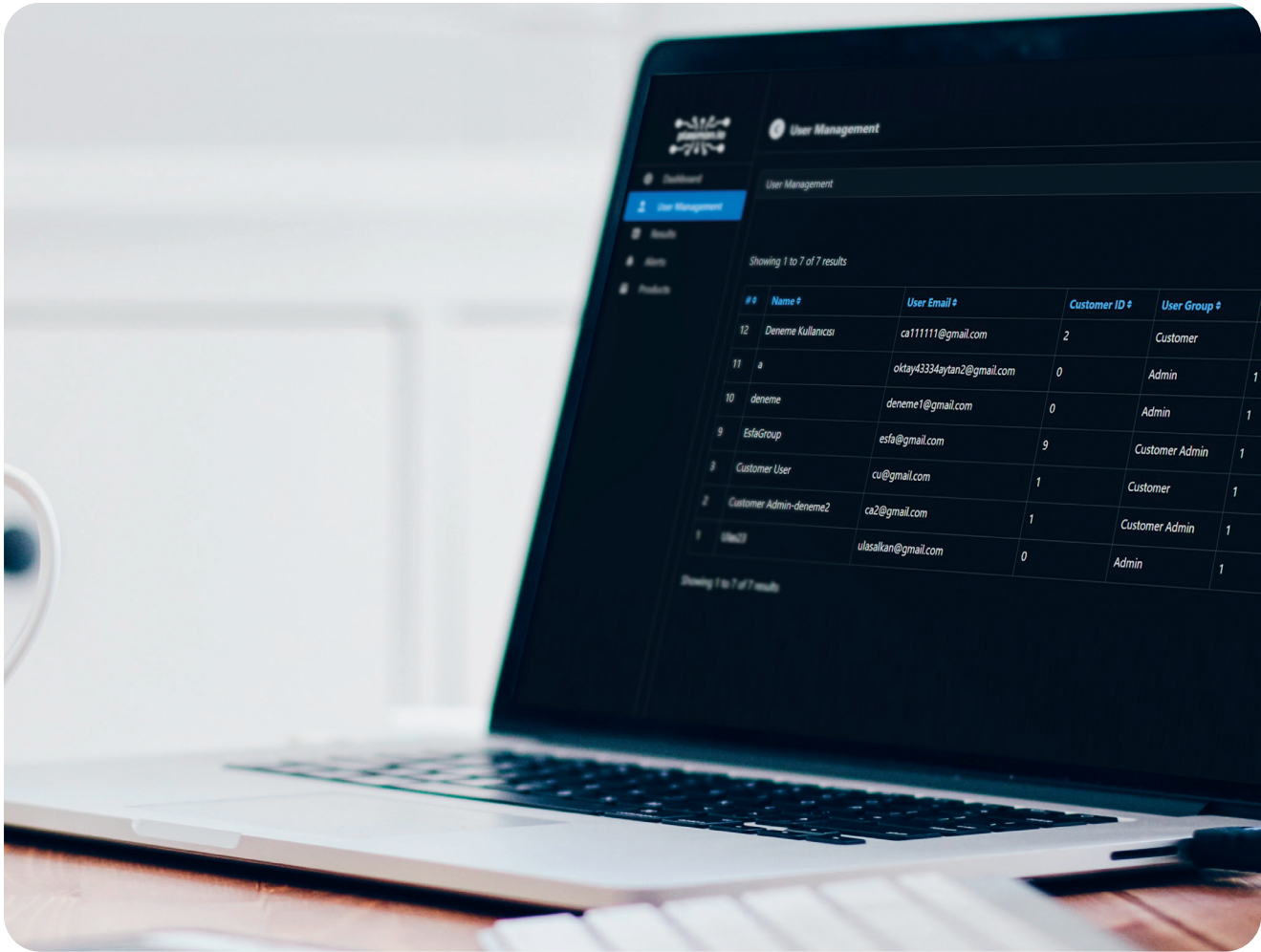
- Cloud connection via Wi-Fi
- Supports up to 5 sensors
- LED screen for real-time measurement display
- 5V power adapter
- Battery backup up to 18 hours
- GSM module
- SD cards
- GPS

INDUSTRIAL KIT

- Cloud connection via Wi-Fi
- Supports up to 5 sensors
- 12V power adapter
- Battery backup up to 4 hours
- IP-67 enclosure
- Measurement capability down to -40°C
- Wired sensor support up to 1200 meters for extended coverage and measurement

TRIGGER DEVICE

- Cloud connection via Wi-Fi
- 8-channel 5V trigger output
- 5V power adapter
- Battery backup up to 4 hours



What is “SAPMA PAYI” Deviation Margin ?

Maintaining specific environmental conditions—especially temperature and humidity—during the transportation and storage of products is critically important. The Deviation Margin refers to the extent of deviation from these ideal conditions. In other words, it is the difference that occurs when temperature or humidity levels fall outside the required range. Such deviations can lead to deterioration in product quality, loss of properties, or render the products unusable. Monitoring deviation margins is especially crucial for sensitive items such as food, pharmaceuticals, and chemicals.

Deviation margin per product is calculated based on the predefined ideal temperature and humidity range for that specific item. For example, if the ideal temperature range is between 2°C and 8°C and the measured value is 10°C, then the temperature deviation margin is 2°C. Similarly, if the humidity range should be between 40% and 60% but is measured at 65%, the humidity deviation margin is 5%. This calculation helps evaluate how sensitive a product is to environmental conditions and assess the risk level.

Why Should Deviation Margin Be Monitored?

- **Product Quality:** Ensures that products reach the end user without losing their properties.
- **Regulatory Compliance:** Especially in the pharmaceutical and food industries, compliance with storage conditions is legally required.
- **Cost Control:** Prevents financial loss caused by spoiled or damaged goods.
- **Consumer Safety:** Helps maintain brand reputation by offering safe and healthy products.

How is Deviation Margin Calculated?

There are two methods to track deviation margins:

Manual Data Upload

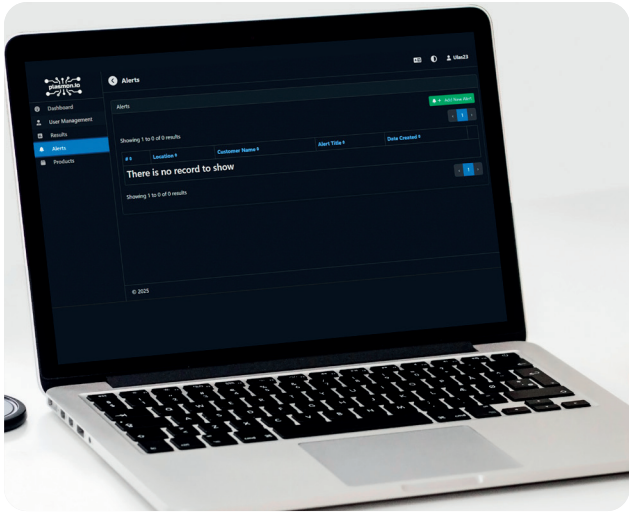
Data collected from other measurement devices (e.g., in CSV format) can be uploaded to the system. The system analyzes this data to verify whether environmental conditions stayed within defined limits.

Required fields for manual data upload:

- Product Code
- Product Name
- Environmental Conditions (Temperature, Humidity, etc.)
- Product Location

Automatic Tracking (Using Plasmon Devices)

Plasmon devices continuously record data such as ambient temperature and humidity. The system automatically analyzes this data and sends instant notifications if a deviation occurs. This allows the entire process to be managed digitally without the need for human intervention.



In Which Fields Is It Used?

The deviation margin of temperature and humidity measuring devices is used in areas where precise environmental monitoring is essential, such as agriculture, food storage, pharmaceutical production, laboratory testing, HVAC (heating, ventilation, and air conditioning) systems, industrial manufacturing, remote monitoring of products during logistics processes, and building climate control.

The accuracy of measurements is critically important for product quality, safety, and energy efficiency. Determining the deviation margin helps to obtain accurate and reliable data.

Usage Workflow

1. Data Loading / Integration

Products and location mappings are performed.

3. Notification

If a threshold violation is detected, real-time notifications are sent via SMS and email.

2. Analysis and Measurement

Predefined threshold values are checked and compared. Deviations are monitored.

4. Reporting

Data can be reported in a digital environment.



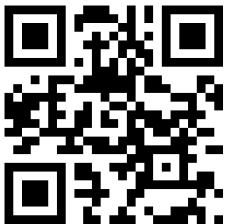
Our Certificates



İstinye Garage incubation hub Ayazağa Mah. Kemerburgaz Cad. Vadi İstanbul Park Sitesi 7A Blok No:7B Kat:2 İç Kapi No:4 Sarıyer – İstanbul



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