Sycon.

Make your machines talk

■ **Deploy**

Connect
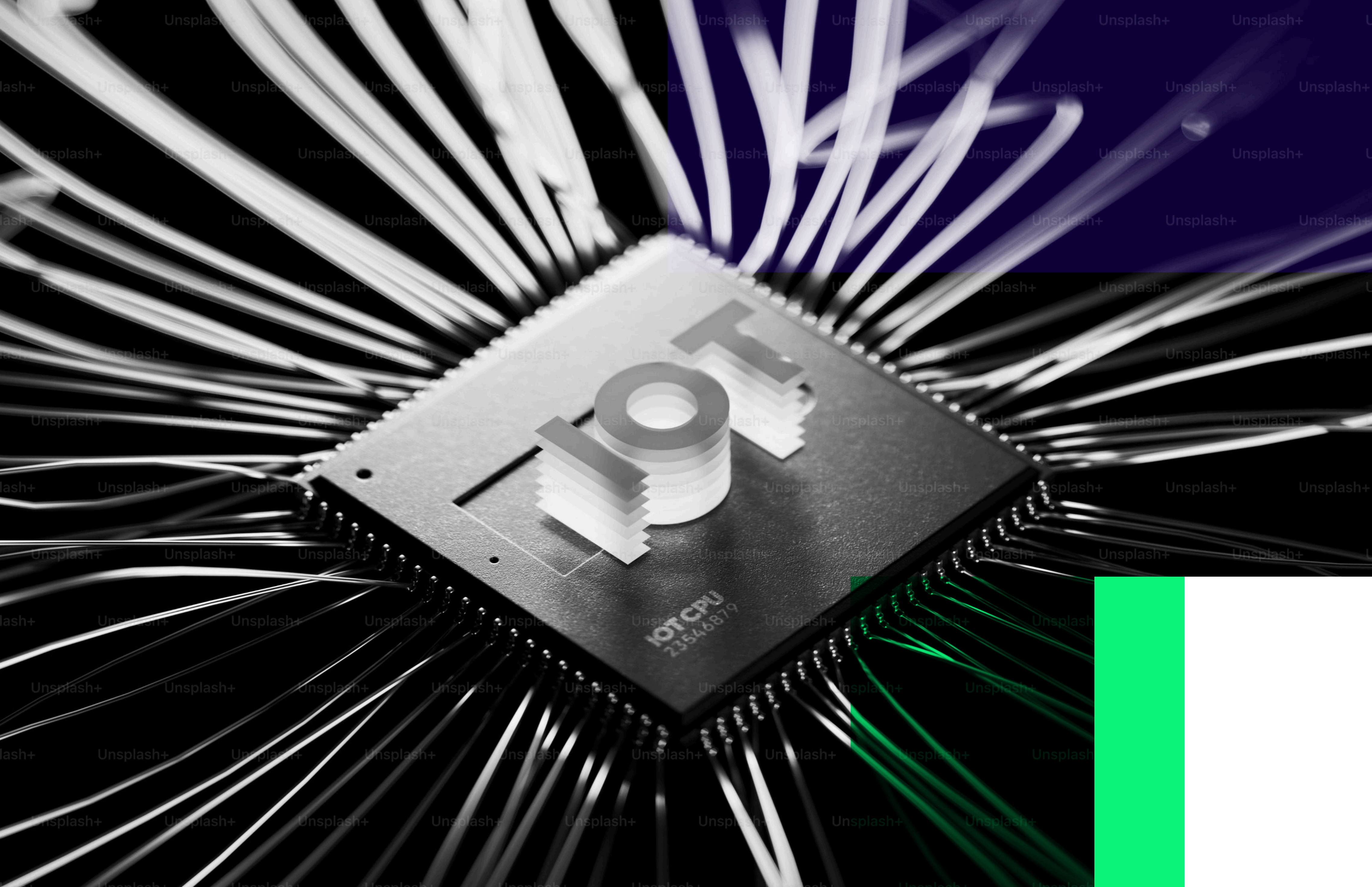
Optimise

IoT   Security   IA   Wireless   Plug&Play
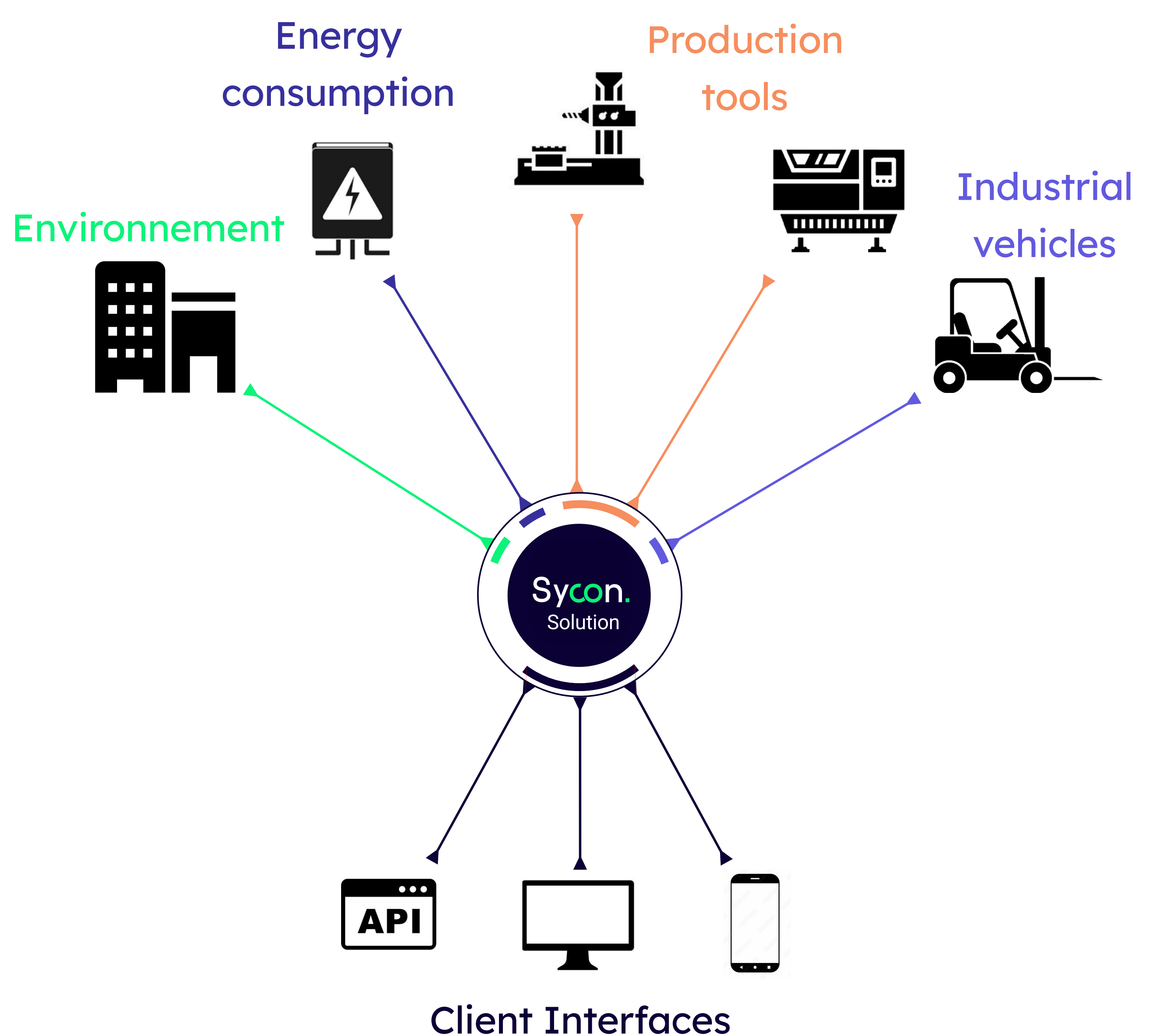
GÉNÉRATION
DEEP
TECH

CO.

■ Who are we ?

Sycon offers an innovative ecosystem to support industries in their digital and sustainable transition, leveraging advancements in microelectronics, communications, data analysis, and artificial intelligence. Our solution ensures optimal data utilization, from collection to visualization.

■ Our Solution

Our system is based on a smart and connected device, designed to be seamlessly integrate with machine tools, key points in the production line, and even external equipment like vehicles.

This device can collect and securely store a wide range of relevant data from machines and their environment, including vibrations, energy consumption, temperature, and more. The data is then processed and made accessible on any digital platform.

Energy consumption

Production tools

Environnement

Industrial vehicles

Sycon. Solution

API

Client Interfaces

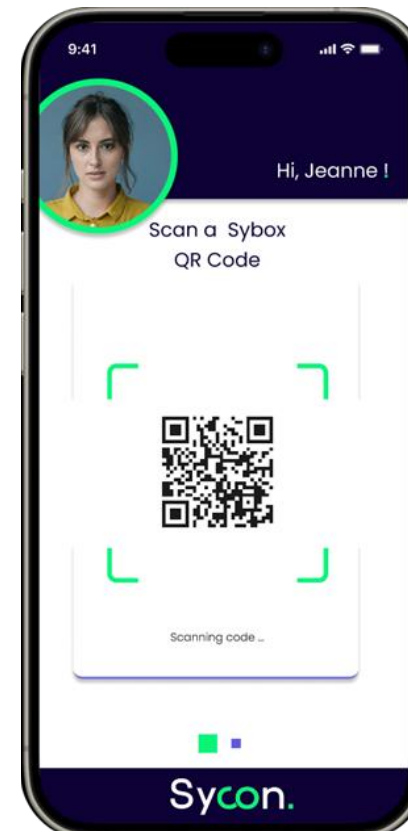| 3-15%	Energy Cost Reduction, CSR Approach	5-10%	Production Optimization, Failure Anticipation
	Real-time monitoring and optimization of consumption Tracking environmental impact		Real-time machine monitoring Early detection of machine deviations Real-time alerts

Deployment

1

Place the device on the equipment you want to monitor.

2

Activate the device by scanning its QR code and linking it to your user account on our website.

3

Access monitoring information through our web interface or integrate it into your tools using our API.

30 **min** — **Deployment Plug & Play**

5G **Private** — **Deployment of a private 5G network, without infrastructure**

Key features

Internal Sensors :
- Environmental
  - Temperature, atmospheric pressure, humidity, air quality, CO2, light

- Mechanical
  - Vibrations

- Geolocation
  - Horizontal (accuracy: 30m)
  - Vertical (accuracy: 1m)

External Sensors :
- Electrical Consumption
  - Wireless
  - Range
    - < 35A, < 180A, < 500A
    - 220V, 380V, …
    -

Power Supply :
- USB-C (5V)

Connectivity :
- Between devices
  - DECT-NR+ (private 5G without dedicated infrastructure at 1.9GHz)
- To the cloud
  - LTE-M / 5G / NB-IoT

Installation
- Magnetic – Screwed – Glued

Dimensions
- 90x65x26 mm

Cybersecurity
- Encryption
- VPN
- Access controls
- Choice of trusted cloud provider
- Secure boot
- No physical gateway (no SPOF)

A simple and secure solution at every level

They work with us

Why is this project crucial?

Optimizing production: The sensors measure temperature, humidity, CO2, and vibrations to detect anomalies and understand the root causes of defects.

Sustainability: This data will help improve not only performance but also the environmental conditions of our processes, reducing our carbon footprint.

Precision & performance: By installing these sensors across various machines, we aim to enhance resource management and minimize downtime.

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