

iotto

MONITOR

CHECK

SAVE



THE SYSTEM OF INTERNET OF THINGS FOR THE REDUCTION OF BUSINESS COSTS

The solution **iotto**, designed by Onit Group, is the right tool to solve the growing increase in costs related to production processes, from energy consumption to operational and maintenance expenses. Everything becomes easier as you take **control of all the information** needed to immediately identify the criticality and promptly intervene to resolve them.

iotto allows real-time monitoring of any data and puts it at the disposal of the user through a simple and intuitive interface. It can be used to monitor industrial plants, machinery, machining lines and to control HVAC systems, lighting, access control, video surveillance; to manage **Building Automation** systems, renewable sources systems, co-generators etc.

A functional system of **editor** allows the user to create custom dashboards that with the information collected, allows:

- **the analysis** of the data with the creation of formulas and indexes (KPI),
- **the control** of the performances with the management of alarms and alerts,
- **the adjustment** of the equipment according to models and set point of reference,
- **the integration** of all the various systems of measurement/automation present in the company in a single operating environment.

AREAS OF APPLICATION:

- ✓ **PRODUCTION SITES**
Industries, SMES and ISO 50001
- ✓ **BUILDING**
Multi-site facilities, Public administration and residential buildings
- ✓ **PRODUCTION & SUPPLY**
Multiutility, renewable sources of energy and co generation plants

OUR TARGET USERS:

- ✓ Factory Managers
- ✓ Energy Managers
- ✓ Industrial Managers
- ✓ Facility Managers
- ✓ Plants Maintainers
- ✓ ESCO and energy consultants



Identify the critical points and the potential savings

- Data recovery
- Sampling on centralised computerised system iOTTO
- Defining key performance indicators (KPIs)
- Analysis of faults and criticalities



Optimize and improve the processes

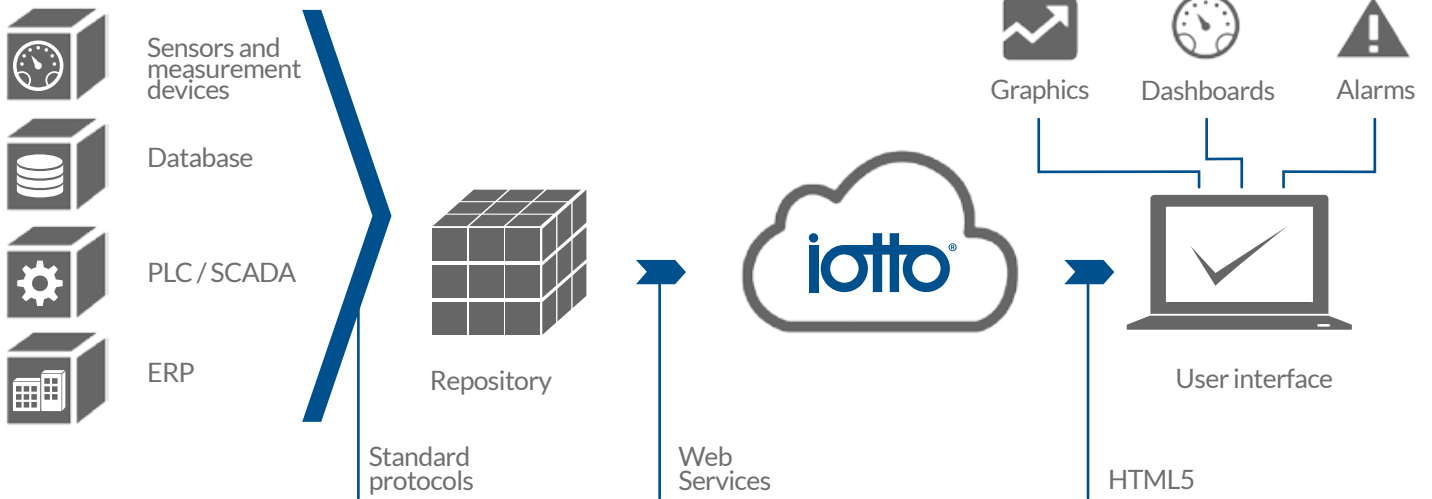
- Interventions to increase efficiency
- Detecting and reducing waste
- Management and operational optimization
- Structural measures



Monitoring and maintenance savings

- Preventive Maintenance
- Continuous control of deviations from set point
- Assessment of return on investments
- Comparison and verification of the cost reduction

ARCHITECTURE



CHARACTERISTICS

Real-time monitoring and direct acquisition of data through technologies open and standard

Formula Editor to create indexes of performance and Widget interactive graphs

Advanced data management through matrix analysis

Dynamic management of alerts and alarms (SMS, e-mail, voice call)

Integration with different intelligent systems (video surveillance, fire, accesses control, HVAC)

Tuning of the installations based on efficient models developed on statistics

ADVANTAGES

Immediate overview of criticalities and reduce decision-making reaction time

Use of extra energetic data to determine kWh/kg of product, kWh/pieces, €/Km travelled, returns etc.

Identify and analyze the costs on the basis of departments/ lines/products/shifts/working etc.

Instant communication to responsible staff

Single interface for control and monitoring

The operation is always optimal on the basis of the independent variables



TOP FEATURE

- ✓ Supervision through wall diagrams created by the user
- ✓ Analysis of Linear Regression and Cusum for the development of efficient models
- ✓ Multidimensional analysis with pivot charts
- ✓ Personalized report
- ✓ Display through smartphone and tablet

ALL-INCLUSIVE SOLUTIONS

Thanks to the different collaborations with qualified partners, Onit Group is able to offer its customers solutions and turnkey projects covering the entire value chain.



Energy diagnosis
ISO 50001
Increase efficiency
and optimization



Meters
Sensors
Centralizers
PLC



Installing meters
Wiring
Electrical
Switchboards
Data network



SW installation
Configuration
Customizing



Training
Training on the Job

IOTTO BOX

iOTTO Box is an **intelligent control unit** used for the collection and the sampling of the data coming from the different sensors and measuring devices installed. It is used for the **management of energy loads** inside the business premises with plants and buildings that have complex situations with many electrical switchboards.

iOTTO Box is the right solution to reduce all the **infrastructure costs** and allow all businesses to implement a **system of data collection** with the minimum effort.



HOW DOES IOTTO BOX WORK?

iOTTO Box is installed in each electrical panel in which it is necessary to monitor the energy loads. For each energy load a meter and the relevant TA are installed, usually inside the switchboard or through a dedicated switchboard in the vicinity.

The meters are connected to **iOTTO Box** via a dedicated bus on standard protocol that is used for data transmission between the devices.

iOTTO Box collects the data of the various devices and puts them at the disposal of the software platform through a simple LAN data connection (Ethernet or wireless).

The data are then sent to the repository present in a Cloud remote server or in the customer datacenter and are available to be displayed in the user interface on your device.



Avoid wirings outside the switchboard to connect the devices

Reduce the costs linked to the electrical connections when I have to monitor various loads present on several switchboards.

A series of low cost meters proposed by Onit already integrated can be used

Minimal investment in the hardware infrastructure and native integration with the system

Avoid wirings for the data network

Reduce costs because it is not necessary to bring the data network toward all switchboards monitored thanks to the use of wireless technology

Avoid data loss

All data are sampled within the control unit, therefore even in the event of a network failure there is no loss of information

Integrate all meters and sensors already present in the company

No need to replace the existing measurement and control system

Avoid sampling all the data within a single data centralizer

If a device has some problem the others continue to operate in an independent manner

Avoid the purchase of expensive Datalogger

iOTTO Box is comparable to an additional meter

The system can be upgraded

Meters and sensors can be added also in the future

ADJUSTMENT AND IMPLEMENTATION WITH IOTTO BOX

The solution can be upgraded to carry out also a real active adjustment through **planning** and an **intelligent control** of the loads.

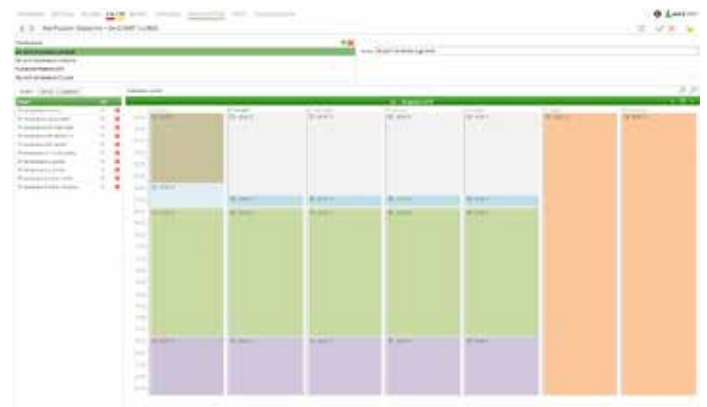
This can be done with the installation of freely programmable digital regulators coupled to each component in the field by means of analog/digital signals.

For a greater reduction in costs the existing wiring between the switchboard and the device is maintained.

It will be then possible to implement **custom logic of operation** of the devices according to the state and the value of the variables acquired in the system, by substantially automating the operations.



Plants adjustment



Time planning