THE FUTURE OF THE INTERNET OF THINGS
THE SOLUTION FOR INDUSTRY 4.0

The iOTTO platform, made by Onit Group, is the right instrument for reducing the costs linked to production processes, and for having control of all the information necessary for immediately identifying critical issues and intervening promptly to resolve them.
ARCHITECTURE

Advantages

- Real time monitoring of the crucial data allows one to have a rapid view of the critical issues and speed up reaction times
- The EDITOR system allows total customisation of the interface, even without computer skills
- Strategic choices are facilitated by advanced analysis thanks to formulas and graphic widgets
- Dynamic management of the warnings for immediate communication to the managers (SMS, email, Alarm apps)
- Single interface control and supervision through integration with all systems present in the company
- Optimised processes on the basis of efficient models and continuous improvement of the activities

Top Functions

- Customisable synoptics and supervisors
- Linear Regression and Cusum analyses for the development of efficient models
- Multidimensional analysis with pivot tables
- Automated and configurable reports
- Manutenzione Predittiva e Machine Learning

Monitoring and Alarm Systems

Data Analysis and Predictive Maintenance

Systems Integration and Adjustment
INDUSTRY 4.0 AND MACHINERY AND PLANTS INTEGRATION

The iOTTO platform uses an advanced system of data collection, called Data Retrieval. This software component allows the recovery of data from PLCs on board the machine, from sensors or gauges, from spreadsheets, from the databases of third parties or those from business management.

The system is bidirectional, since the Data Retrieval acts both in reading and writing mode, this makes it possible to set up a machine, set parameters, configure the set points and make the best use of Building Automation systems as well as managing a plant or a production line.

Data Retrieval is a component that can be provided as embedded to the physical Datalogger (e.g., it is present in the firmware of the iOTTO Box) or it can be installed on any PC within the customer network, acting as a virtual Datalogger.

### Advantages:
- Overall and real time control of the industrial processes
- Low infrastructure costs to monitor all the critical points of the process
- Rapid implementation and with minimum effort

The various devices interact with iOTTO through dedicated drivers on standard protocols that are used for data transmission between the apparatuses.

### Some of the protocols already interfaced:

- Modbus
- Bacnet
- OPC UA/DA
- Lonworks
- SNMP
- Siemens S7
- OMRON FINS
- ODBC
- Obix_Honeywell
**INDUSTRY 4.0 AND SUPERVISION OF PRODUCTION**

ITOTO is the web software produced by Onit for the supervision of production thanks to the interconnection with the production plants. The advantage is having a real time instrument that offers a comprehensive view of the production plant, monitoring the processes and providing reports to optimise resources.

**ISLAND MONITOR**

Functions:
- Status of the production progress
- Monitoring of one or more stations
- Confirming article change on the panel line
- History of the data (qty produced, consumption, status of the machinery, alarms, etc.)
- Shifts management

**PRODUCT RECHARGE AND INTEGRATION WITH ERP**

Change data by Article:
- Code and Description
- Conversion Coefficient (e.g., pieces>m2, pieces>Kg)
- Obsolete product management

Change data by Production Plan:
- Production date
- Item Code/Line/Work Order
- Production notes
- Production reports toward ERP

**TIME MANAGEMENT AND MACHINERY SET-UP**

Functions:
- Operating instructions for the line operators
- Definitions of the max. time to complete line set-up
- Alarms system for exceeding time budget assigned
- Setting can be automated on the basis of the article
- Homogeneous SCADA/synoptic interface for all machinery

**STOP AND MAINTENANCE MANAGEMENT**

Functions:
- Entering automatic stop from integration with machines
- Cause log of the stop
- Filters (date, line, machinery, group stop, stop)
- Report with stop classification by frequency/duration
- Integrated Pareto analysis
- Dedicated dashboard operator

**KPI - PRODUCTION PERFORMANCE**

Real time monitoring of:
- Actual production vs target
- Actual speed vs target
- Actual line set-up time vs target
- OEE (scrap, availability and consumption)
- Labour, line hours
- Energy-intensive systems consumption
- Yields by choice
- Machinery status
- Alarms and warnings

**SECTORS OF APPLICATION:**
- INDUSTRY - Industries, SMEs and production sites
- BUILDING - Multisite and tertiary structures
- ENERGY - Multiutility, EGE and ESCO
- FACILITY - Plants, machinery and devices