

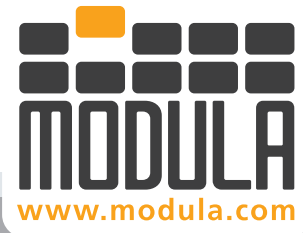


Modula Cloud

Think Vertical, Think Modula

ALWAYS-ON WAREHOUSE MANAGEMENT AND SUPPORT

OUR PRODUCTS ARE
★ **MADE IN USA** ★
From US & Imported Components



Secure, Remote Warehouse Management, Support and Analytics

Modula Cloud is a remote management, support, and analytics platform, which collects statistical data from all your automated storage and retrieval systems, no matter where they are located.

Built-in and always-on, the Cloud platform captures all data in an easy-to-navigate online portal where users can securely monitor and manage your operations, from any device, anywhere in the world.

With all processes relating to the Modula storage and retrieval units recorded and analyzed in real time, our expert technical resources can remotely diagnose and perform predictive maintenance, whenever help or support is needed.

Modula Cloud puts all the information you need at your fingertips and empowers you with advanced management, support, and analytics capabilities such as:

- Remote monitoring of your advanced Modula storage systems.
- Remote warehouse management.
- Remote support, diagnostics and resolution.
- Preventive warehouse maintenance.

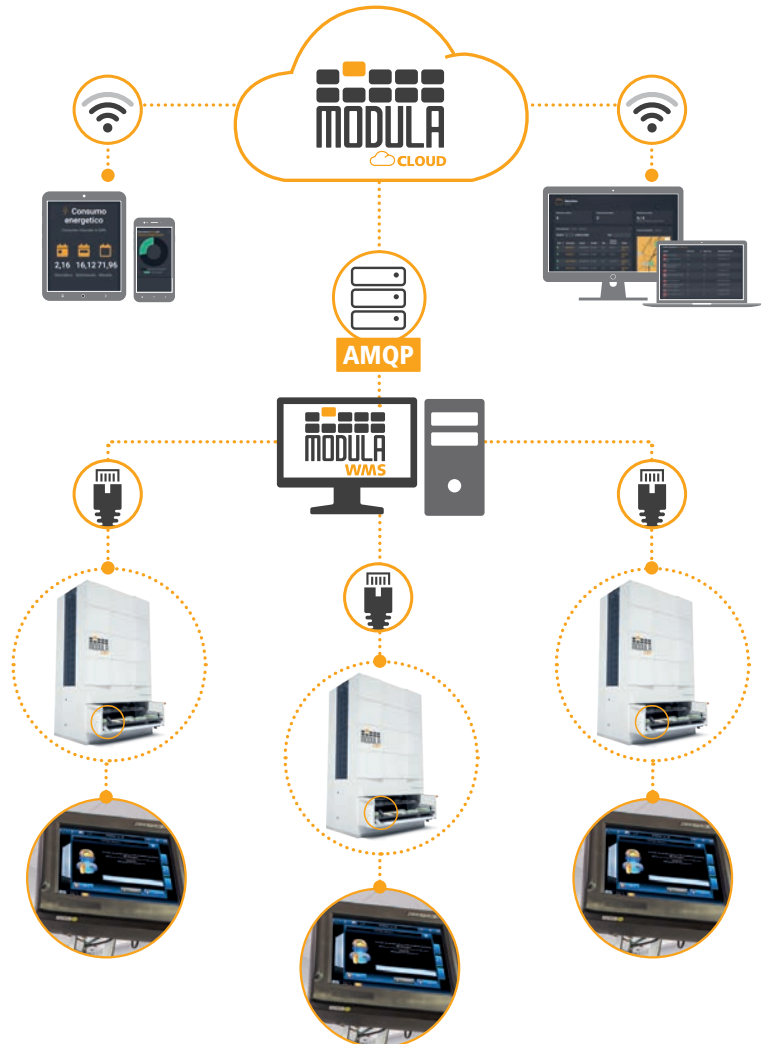
How does the Modula Cloud work?

The statistical data from each Modula storage unit is collected and analyzed by the Modula WMS, which automatically transfers the information to our customer's secure Modula Cloud platform.

Using the latest in user authentication security, the individual machine or aggregate data can then be viewed on the customer portal, accessible on any device, from any location. Each Modula Cloud instance allows you to create multiple users and determine the user access level for each.

Thanks to the Modula Cloud, you can monitor remotely the status of one or several plants regardless of their location. An interactive map lets you see all the points where a Modula product is operating, and with a simple click on the map, you can access the reports for each individual unit.

CLOUD SYSTEM ARCHITECTURE

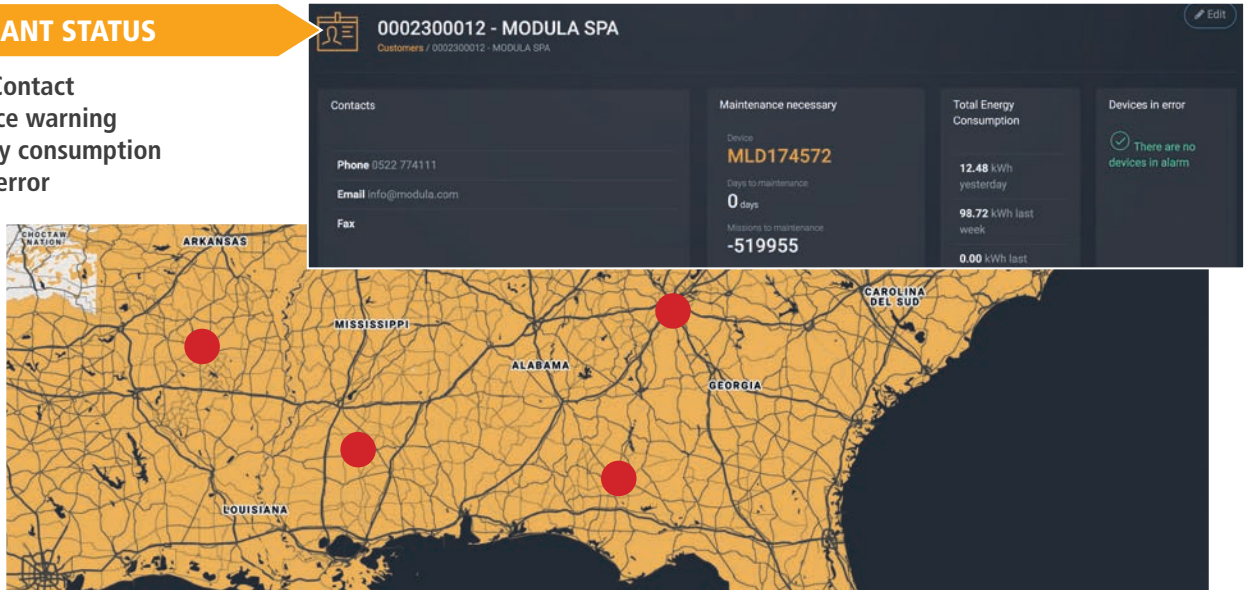


Integrated Warehouse Dashboards

Modula Cloud collects and processes all information and activities coming from your warehousing operations, including core system and telemetry data aggregated from all your facilities across any location, city or country, so that the data of each individual Modula storage unit or Modula-powered warehouse is always available and accessible.

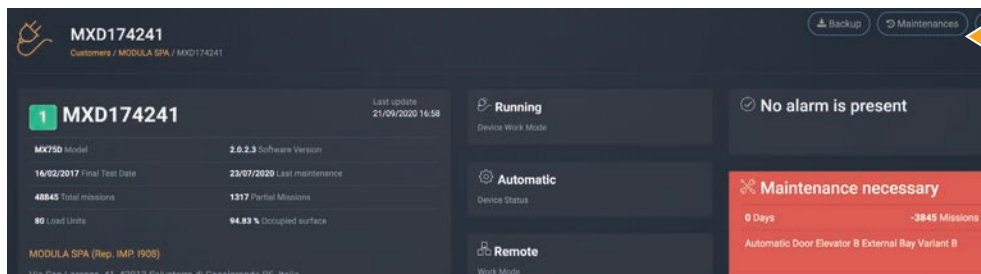
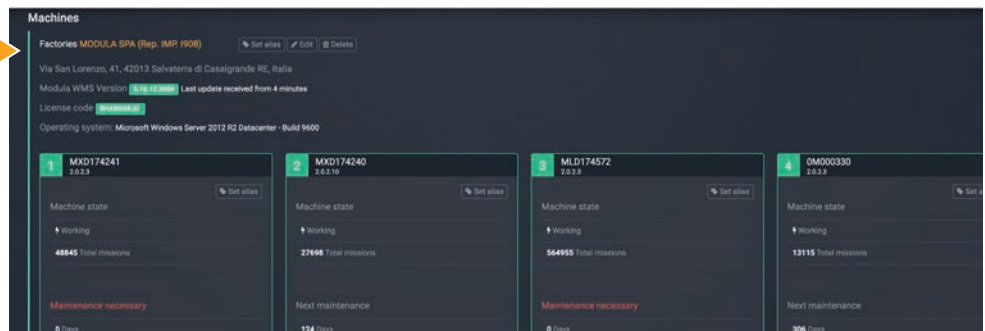
GENERAL PLANT STATUS

- Customer Contact
- Maintenance warning
- Total energy consumption
- Devices in error



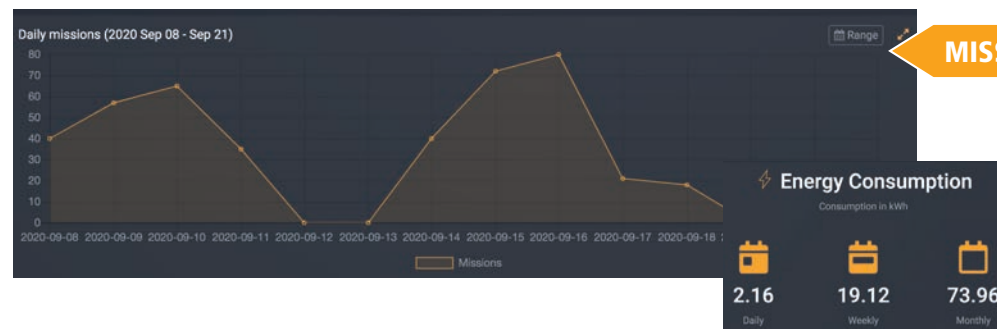
MODULA UNITS

- Modula WMS version
- License code
- Operating system
- Modula working order
- Modula OS version
- Maintenance overview



UNITS STATUS

- Model
- Total mission
- Partial mission
- Last maintenance
- Software version
- Total LU (trays)
- Alarms & Maintenance Warning



MISSION & ENERGY CONSUMPTION

- Number of missions per day or range
- Machine energy consumption

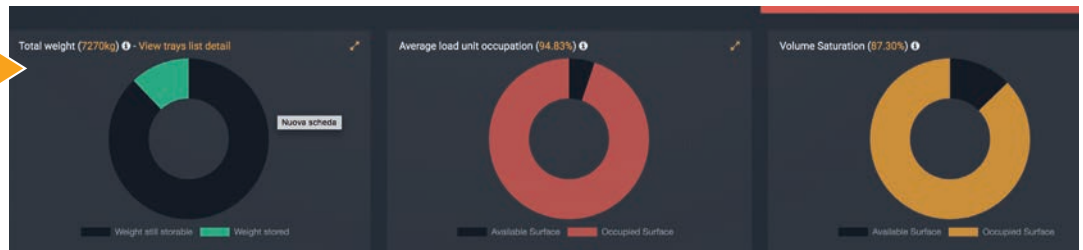
Remote End-to-End Warehouse Management

Real-time remote monitoring of storage systems, down to the tray

You'll know immediately if a machine is running properly, is offline, or is experiencing a problem that needs to be addressed. You'll get detailed reports on how efficiently the machine's trays are being used. If they're out of balance, you can inform your workers how to reallocate items. You'll see how many cycles have been run, orders have been filled in a given time period, energy consumed, and other relevant data.

TRAYS DETAILS

- Total weight
- Average trays occupation
- Volume saturation
- Detailed view (view all)



Modula Web Analytics

Search by Customer, Order or Factory

Alice Bellelli

Trays List MXD174241

Client / MODULA SPA / MXD174241 / Trays List MXD174241

Last update: 01/07/2020 17:23

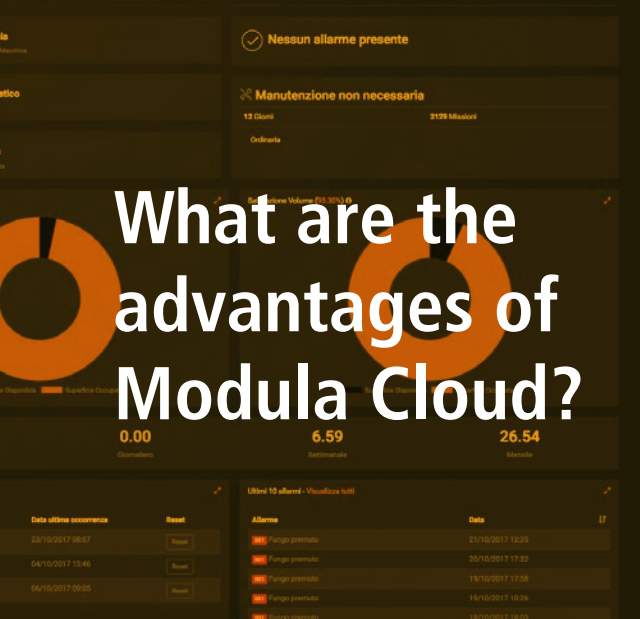
Maximum Tray Capacity: 799

Show 25 entries

Drawer No.	Height (mm)	Max height in bay (mm)	Class	Weight(kg)	Theoretical Weight(kg)	Occ. Area	Occ. Area with stock	Total Mis.	Part. Miss.
1	200mm (8 cells)	0mm (0 cells)	A	70kg	0kg	99.88%	89.89%	975	23
2	150mm (6 cells)	0mm (0 cells)	B	98kg	0kg	99.77%	99.77%	243	2
3	175mm (7 cells)	0mm (0 cells)	B	0kg	0kg	100%	100%	43	
4	150mm (6 cells)	0mm (0 cells)	B	42kg	0kg	99.77%	99.77%	45	
5	150mm (6 cells)	0mm (0 cells)	B	0kg	0kg	100%	100%	136	
6	200mm (8 cells)	0mm (0 cells)	B	56kg	0kg	99.87%	99.87%	482	3
7	200mm (8 cells)	0mm (0 cells)	B	13kg	0kg	100%	100%	219	
8	150mm (6 cells)	0mm (0 cells)	A	28kg	0kg	99.87%	99.87%	435	3
9	150mm (6 cells)	0mm (0 cells)	B	0kg	0kg	100%	66.68%	118	
10	200mm (8 cells)	0mm (0 cells)	B	165kg	0kg	100%	100%	42	
11	150mm (6 cells)	0mm (0 cells)	B	98kg	0kg	100%	100%	32	
12	150mm (6 cells)	0mm (0 cells)	B	56kg	0kg	100%	100%	30	
13	150mm (6 cells)	0mm (0 cells)	B	98kg	0kg	100%	100%	217	
14	250mm (10 cells)	0mm (0 cells)	A	70kg	0kg	100%	100%	511	

SATURATION





Always-on Supervision and Remote Control

You'll know immediately if a machine is running properly, is offline, or is experiencing a problem that needs to be addressed. You'll get detailed reports on how efficiently the machine's trays are being used. If they're out of balance, you can inform your workers how to reallocate items. You'll see how many cycles have been run, orders have been filled in a given time period, energy consumed, and other relevant data.

10 Most frequent alarms - Show all

Alarm	Total Occ.	Parz. Occ.	Total Downtime	Par. Downtime	Last occurrence date	Reset
001 Emergency button pressed	596	596	2326	2326	18/09/2020 14:04	Reset
016 Intermediate safety barrier intervened	502	502	7614	7614	18/09/2020 13:11	Reset
006 Safety barrier intervened	403	403	291	291	15/09/2020 08:20	Reset
103 Inverter error	73	73	193	193	11/08/2020 06:40	Reset
030 Side doors safety microswitch of bay error 1	66	66	257	257	23/07/2020 16:11	Reset
206 Bay 1 Level 2 not in position	9	9	57	57	15/01/2018 15:53	Reset
070 Tray not unloaded into bay	7	7	11	11	15/06/2020 12:21	Reset
038 Tampering with the safety circuit has been detected	5	5	11	11	29/06/2017 18:16	Reset
107 Incorrect position (Vertical/Chain)	4	4	74	74	28/01/2020 17:30	Reset
163 Rolling shutter 1 timeout	3	3	3	3	06/02/2018 08:55	Reset

TOP 10 ALARMS

LAST 10 ALARMS

Last 10 alarms - Show all

Alarm	Date
001 Emergency button pressed	18/09/2020 14:04
016 Intermediate safety barrier intervened	18/09/2020 13:11
001 Emergency button pressed	15/09/2020 08:20
006 Safety barrier intervened	15/09/2020 08:20
001 Emergency button pressed	11/09/2020 17:04
001 Emergency button pressed	11/09/2020 14:05
016 Intermediate safety barrier intervened	11/09/2020 13:19
001 Emergency button pressed	09/09/2020 11:26
006 Safety barrier intervened	09/09/2020 11:24
001 Emergency button pressed	07/09/2020 15:58

ALARMS EXPORTS

Copy CSV PDF Print



A Direct, Always-On Line to Customer Care

Diagnoses from afar can be very complicated. Modula Cloud changes that. Because all of your storage system information about the machine needing attention - the type, the location, your contact information, and the problem itself - has already been captured in Modula Cloud, there's no need for your staff to provide those details.

With Modula Cloud, you just click and help is there. Modula Cloud features a "call from Copilot" function to immediately let Customer Care know you need assistance. No remembering of details, emails or phone calls are needed - a Modula technician will call you back right away, with everything pre-populated for them. Remarkably enough, 80 percent of machine alerts, issues or disruptions can be resolved with just a phone call. Our technicians are always there to guide you on how to fix the problem in real time.



Predictive maintenance

The Modula Cloud remotely collects data from the connected Modula storage units and runs algorithms on the information to create optimum maintenance schedules and assess when interventions are needed.

Each customer can access this information in real-time through the Cloud's secured portal, and share them with Modula's Customer Care service team. This continual feedback loop on the health status of the storage systems keeps everyone informed of any issues and automatically prompts alarms and work orders through predictive maintenance algorithms.

As a result, our customers keep their maintenance and management interventions to a minimum and avoid unexpected costly production downtimes.

MAINTENANCE

MXD174241 Maintenance history

Detected	Missions	Group	Priority	Executed	Missions (final)
07/02/2020 03:00	43721	Preventative Maintenance			
08/03/2019 13:20	-1	Preventative Maintenance		08/03/2019 13:20	33097
16/01/2019 03:00	30759	Preventative Maintenance		08/03/2019 01:00	33097
15/02/2018 01:00	-1	Preventative Maintenance		15/02/2018 01:00	16824
18/01/2018 03:00	15207	Preventative Maintenance		15/02/2018 16:37	16824

Entries from 1 to 5 of 5 entries

First < 1 > Last



Insights-Driven Dashboard and Analytics Customization

A Modula automated storage solution is an investment that pays big dividends: saving space and time, ensuring accuracy in order fulfillment, tracking inventories precisely, and creating a better, safer work environment.

With Modula Cloud, these advantages are enhanced with ease of control and visibility of your machines and operation, from any device, no matter where you are located. What's more, the Modula Cloud can be customized to suit your preferences for receiving information.

Do you want a dashboard with order lines filled on a certain day? Do you want reports sent directly to your email address with aggregate data on all your machines to check on their productivity? You can do this up and much more in just a few steps.



Secure data and hosting

Modula Cloud has been developed leveraging technology solutions from Microsoft and is hosted on the secure Microsoft Azure cloud platform. The system uses the latest cryptographic systems for authentication and data exchange between the Modula WMS and the Modula Cloud. Authentication is provisioned through the HTTPS/TSL protocol, with RSA encryption at 2048 bits. Data is transferred securely through the AMQP protocol.

The Modula Cloud is equipped with the following industry-leading certifications, among others:

- ISO/IEC 27001, Management systems for information security
- ISO/IEC 27017, Code of conduct for security checks of information based on ISO/IEC 27002 for services in the cloud
- ISO/IEC 27018, Code of conduct for protection of personal information and identification (PII) in public clouds that act as PII processors.

Secure business operations:

Modula Cloud only gathers information about your machine's operations. It does not access or record any data about your products or business operations.



Modula World



Modula is present in 5 continents with dealers and branches located in over 50 countries

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