

Catalog

Products and services

Mobile robotics

Expert



_Innovation for human

Meanwhile is a company created around a common vision: the consideration of women and men, their experience and their know-how as well as all the value they represent within the company.

Meanwhile designs and installs autonomous, intelligent and modular mobile robots intended for the transport of goods through your infrastructures.

Meanwhile offers "For Human" solutions, so that "Meanwhile...", women and men can focus on high value-added tasks.

05

years of experience

10

robot models



Autonomous and collaborative mobile robotics



In a context of Factory of the Future, Smart Hospital, Smart City, robots should no longer replace humans but help them in their missions, thus allowing humans to avoid painful, repetitive or low value-added tasks. Mobile robots are able to react autonomously to a specific situation.

An autonomous mobile robot is a robot that navigates in its environment using a previously assimilated map and its many localization and security devices. It does not need to be guided which minimizes the commissioning effort. It is also able, depending on the settings applied, to optimize its route and to go around obstacles in its path or quite simply to decide to take a different non-predefined path.

A mobile robot is a robot designed to work in the same area as operators. It integrates safety functions (intrinsic safety, sensors, cameras, etc.) to facilitate human-robot interaction. Users can then refocus on their higher value-added tasks while mobile robots take care of transporting products from one location to another.

Why Meanwhile mobile robots ?



100% autonomous navigation

The mobile robots proposed by Meanwhile are autonomous in their path. They use Artificial Intelligence, made up of complex algorithms allowing them both to locate themselves at all times and to dynamically avoid any obstacle that has not been mapped. Thus, mobile robots are able to navigate in complex environments, in the presence of operators and handling equipment, while ensuring optimal efficiency in their transport.



Facilitated communication

Mobile robots communicate using WiFi naturally. On the other hand, to allow level 1 communication (from machine to machine), each mobile robot can be equipped with Bluetooth modules. These modules make it possible to interface with any device equipped with a Bluetooth communication channel (door opening module, OmniBox, etc.). It is also possible, to a certain extent and at short distance, to use Bluetooth as a palliative to WiFi when its signal is too weak.



Ergonomic design

Meanwhile mobile robots are equipped with an embedded HMI (Human Machine Interface) allowing easy and intuitive interaction with the mobile robot. (Example: Knowing the state of the mobile robot, interacting with it, modifying the mission(s) in progress, the configuration of the communication channels, handling the robot in maintenance mode, etc.) On the other hand, each mobile robot is equipped with brake release buttons, ideally located to move the robot manually very easily if necessary.



Safe and secure

The solutions offered by Meanwhile are C.E. certified, comply with the ISO 3691-4 standard, the Machinery Directive 2006/42/EC and are equipped with laser scanners. Meanwhile undertakes to carry out a complete risk analysis of each provided solution, taking into account the environment in which mobile robots operate. Meanwhile provides this risk analysis as a deliverable of the application, thus ensuring complete transparency on safety and environmental aspects.



24/7 availability

By practicing opportunistic charging, mobile robots can be available 24/7. As soon as the robot has a sufficient period of inactivity or when the algorithm developed by Meanwhile decides, it takes advantage of this time to recharge.

A company that empowers its employees

At Meanwhile, there is a climate of trust and recognition of employees in which everyone is responsible and free to take their own initiatives.

“ For Humans ” Solutions

We are convinced that technology is nothing if it is not humancentric. It is for this reason that we place the well-being of people at the heart of our solutions.

Passion for technology

We are all passionate about new technologies and we capitalize on the knowledge of each member of the team to build our solutions.

“ Impossible ” is not Meanwhile

Ambitious and daring, we love challenges. We take charge of our projects in a responsible, dynamic and positive manner, in a spirit of conquest that allows us to surpass ourselves.

Content

Manufacturing industries

<i>XuP family</i>	XuP-Lift	10
	XuP-Cart	11
	XuP-Semi	12
	XuP-Box	13
<i>Evy family</i>	Evy-Box	14

Health facilities

XuP-Med	18
XuP-Med L	19

Buildings open to the public

XuP-Host	22
XuP-Steri A	23
XuP-Meal	24

Peri-robotic ecosystem

Meanwhile middleware	27
OmniBox	28
Fleet manager	28
Personalization	29

Support and services

Support	30
Commissioning and training	31
After-sales service	31

Manufacturing Industries

Your Challenges

- Improve the traceability of transported material
- Reduce error rates
- Optimize the delivery of the last meters

Our solutions

- Improved productivity
- Reduced musculoskeletal disorders
- Modernization of your value chain
- Improvement of the efficiency of your intralogistics processes
- Maximize your Overall Equipment Effectiveness (OEE)

XuP-Lift

XuP-Lift is dedicated to the transport of bins/boxes between storage spaces and/or between several production lines. Equipped with an Artificial Intelligence specialized in indoor navigation and equipped with a conveyor allowing it to reach different gravity heights, XuP-Lift is flexible and autonomous.



Technical specifications

Payload 35 kg	Application module Bi-zone roller conveyor on up and down	Navigation type Autonomous
Unloaded weight 115 kg	Interface Touchscreen	Speed max 1.35 m/s
Autonomy 10 h	Radius of gyration 350 mm	Security Horizontal and vertical laser scanners, sonars and emergency stops
Height 1,85 m	Communication Wi-Fi / Bluetooth	Certification CE
Transfer height Max 1500 mm	Transfer height Min 650 mm	On-board content Max 600x400mm

Options

Visual presence indicator	Automatic box recentering
Acuity localization	RFID reader

XuP-Cart

XuP-Cart is a mobile robot dedicated to the autonomous transport of carts. The mobile robot docks, picks up, transports and deposits trolleys within your infrastructure.



Technical specifications

Payload 105 kg	Application module Trolley auto-coupling system	Navigation type Autonomous
Unloaded weight 80 kg	Interface Touchscreen	Speed max 1.35 m/s
Autonomy 10 h	Radius of gyration 500 mm	Security Horizontal and vertical laser scanners, sonars and emergency stops
Height 1,35 m	Communication Wi-Fi / Bluetooth	Certification CE



Application

In the factory of an automotive supplier, XuP-Lift transports KLTs between the various operator stations.

The collaborator prepares the orders, places them in boxes stored on a gravity rack and chooses the delivery points. Informed of the mission to be carried out, XuP-Lift comes to load one or two boxes by adapting to the height of the gravity rack. XuP-Lift leaves to make its delivery in complete autonomy, signaling itself with its horn and its visual presence warning device. Once at its delivery point, the mobile robot unloads the box(es) onto the dedicated storage space and sets off on its mission.



Application

In an industry, the XuP-Cart has the task of autonomously transporting carts between different areas.

The operator fills one of the carts. When it is ready, the operator selects his destination from the touch interface available to him. The XuP-Cart then docks the cart to take it to the destination entered. Once at its destination, the mobile robot signals its arrival with a light and sound indicator and waits for an operator to unload the cart. Once the trolley is empty, the operator releases the robot by an acknowledgment from the Human-Machine Interface on board the robot.

XuP-Semi

XuP-Semi is a mobile robot dedicated to transporting FOUPs in clean rooms. It is equipped with a platform moving up and down. The plate moves along 4 axes to align itself precisely with the plate of the fixed station to allow removal or pick-up of the FOUP to the nearest millimeter.



Technical specifications

- Payload** 15 kg
- Application module** 4-axis positioning system
- Navigation type** Autonomous
- Unloaded weight** 135 kg
- Interface** Touchscreen
- Speed max** 1.35 m/s
- Autonomy** 10 h
- Radius of gyration** 350 mm
- Security** Horizontal and vertical laser scanners, sonars and emergency stops
- Height** 1,85 m
- Communication** WI-FI / Optical (E84)
- Certification** CE

Options

- Visual presence indicator
- RFID reader
- Acuity localization

Application

In a factory, a fleet of XuP-Semi delivers FOUPs (Front Opening Unified Pod) independently.

When a FOUP is set up by an operator on one of the fixed starting stations, the robot detects it, automatically picks it up to deliver it to one of the fixed drop-off stations. The mobile robot continues on another mission or goes to its charging station while waiting

XuP-Box

XuP-Box's mission is to deliver boxes between several storage spaces and/or production lines. Autonomous in its route and equipped with a raising and lowering system, the mobile robot automatically loads/unloads on passive fork racks.



Technical specifications

- Payload** 50 kg
- Application module** Tray on rise and fall
- Navigation type** Autonomous
- Unloaded weight** 90 kg
- Interface** Touchscreen
- Speed max** 1.35 m/s
- Autonomy** 10 h
- Radius of gyration** 400 mm
- Security** Horizontal and vertical laser scanners, sonars and emergency stops
- Height** 1,50 m
- Communication** WI-FI / Bluetooth
- Certification** CE

Options

- Visual presence indicator
- RFID reader
- Acuity localization

Application

Autonomous in his navigation. XuP-Box loads, unloads and transports parts containers automatically, in collaboration with a set of roller conveyors and fixed fork stations at the delivery points.

Its lifting platform allows it to transport a 600x400mm box (or two boxes smaller than 300x400mm) and to dock at different heights.

Evy-Box

Evy-Box's mission is to deliver bins that can weigh up to 175Kg between several storage spaces and/or production lines. Autonomous in its route and equipped with a raising and lowering system, the mobile robot will load/unload automatically on passive fork racks.



Technical specifications

 Payload 175 kg	 Application module Tray on rise and fall	 Navigation type Autonomous
 Unloaded weight 250 kg	 Interface Touchscreen	 Speed max 1.20 m/s
 Autonomy 10 h	 Radius of gyration 500 mm	 Security Horizontal and vertical laser scanners, sonars and emergency stops
 Height 1,50 m	 Communication WI-FI / Bluetooth	 Certification CE

Options

- 
Visual presence indicator
- 
RFID Reader
- 
Acuity localization

Application

Evy-Box ensures the automatic and autonomous routing of parts containers within the building. The operator stations are equipped with passive racks for storing empty or full boxes. All of the production scheduling is managed by a miniload.

The transport orders for full or empty bins are communicated to the fleet manager, the mobile robots are then responsible for transferring the bins from fixed position to fixed position, according to the defined schedule. Evy-Box handles the boxes by 1 or by 2 (within the limit of a total size of 800x600 mm).



Health facilities

Your challenges

- Reorganize care
- Respect budget constraints
- Increasingly large footprints

Our solutions

- Delivery on demand
- Improved efficiency of care
- Improved working conditions
- Improve the quality of life in the hospital without major modifications to your buildings
- Traceability and security of the material transported

XuP-Med

Compact Option

An ergonomic design, a secure cabinet, XuP-Med is an autonomous mobile robot intended for the transport of medical goods (diagnostics, blood bags, drugs, chemotherapy, etc.) through health establishments (laboratories, hospitals, etc.). The nursing staff can then refocus on their tasks with the highest added value while XuP-Med takes care of transporting the products from one department to another.



Technical specifications

- Payload** 40 kg
- Application module** Secure cabinet made up of removable trays
- Navigation type** Autonomous
- Unloaded weight** 107 kg
- Interface** Touchscreen
- Speed max** 1.35 m/s
- Autonomy** 12 h
- Radius of gyration** 350 mm
- Security** Horizontal and vertical laser scanners, sonars and emergency stops
- Height** 1,55 m
- Communication** WI-FI / Bluetooth
- Certification** CE

Options

- Visual presence indicator
- RFID reader
- Barcode reader
- Camera
- Pick-to-light

XuP-Med L

Easy to use and autonomous, XuP-Med L is a simplified version of XuP-Med. Dedicated to transporting sample tubes on one level, XuP-Med L very simply consists of a tray that can hold tube racks. These locations are freely accessible and the products transported can be recovered directly by the laboratory technician.



Technical specifications

- Payload** 270 Standard tubes
- Application module** Tray for test tube racks
- Navigation type** Autonomous
- Unloaded weight** 80 kg
- Interface** Touchscreen
- Speed max** 1.80 m/s
- Autonomy** 12 h
- Radius of gyration** 350 mm
- Security** Horizontal and vertical laser scanners, sonars and emergency stops
- Height** 1 m
- Communication** WI-FI / Bluetooth
- Certification** CE

Options

- Visual presence indicator
- RFID reader
- Secure box

Application

In a hospital, XuP-Med's mission is to rationalize the flow of samples by automated distribution of tubes to the specialized sectors and the various laboratory teams.

After scanning his personal badge, the laboratory technician places the samples to be analyzed in the XuP-Med cabinet. Via the touch interface present on the mobile robot, the laboratory technician chooses the delivery destinations. Once the doors are closed, XuP-Med leaves to make its deliveries independently. When approaching a delivery point, the mobile robot signals its presence by emitting a sound and switching on the luminous glass of the room concerned. After identifying themselves on the interface, the recipient collects their samples and the mobile robot resumes its rounds.



Application

Within the same department, XuP-Med L's mission is to rationalize the flow of samples by an automated distribution of tubes to the various laboratory teams.

The laboratory technician places the samples to be analyzed on the XuP-Med L tray. Via the touch interface present on the mobile robot, the laboratory technician chooses the delivery destinations and XuP-Med L leaves to make deliveries independently. Once at its delivery point, the mobile robot waits for the recipient to collect their samples to be analyzed and resumes its rounds.



Establishments open to the public



Your Challenges

- Maintain a high level of customer attractiveness
- Sanitize the environment of your infrastructures
- Improve working conditions

Our solutions

- Fight against infectious diseases in a non-chemical way
- “Wow” effect that will transform your customer experience
- Relieve employees of energy-intensive travel
- Assist your employees on support functions
- Gain flexibility and efficiency

XuP-Host

Autonomous, intelligent and modular, XuP-Host is a multi-purpose autonomous mobile robot which allows on the one hand to assist the staff in their support activities (transport of luggage, transport of linen, transport of mail, assistance with surveillance) and on the other hand to improve the customer experience (delivery of petits fours, room service, etc.).



Technical specifications

Payload 15 kg	Application module 600x400 mm Euro-standard tray or tray	Navigation Type Autonomous
Unloaded weight 80 kg	Interface Touchscreen	Speed max 1.80 m/s
Autonomy 12 h	Radius of gyration 350 mm	Security Horizontal and vertical laser scanners, sonars and emergency stops
Height 1 m	Communication Wi-Fi / Bluetooth	Certification CE

Options


- Visual presence indicator
- Secure box
- Room sensor
- RFID reader

Application

During the day, XuP-Host sends documents through the various departments of the establishment. Equipped with numerous security sensors and a connection to the building, XuP-Host is able to move through the establishment in complete safety and autonomy (autonomous elevator pick-up, automatic door opening, presence signaling, etc.) The mobile robot thus contributes to the reduction of energy-intensive travel for employees, who during this time can concentrate on their core business and thus limit interruptions in their activities. During your events, XuP-Host turns into the perfect host to serve the petits fours.

XuP-Steri A

XuP-Steri A is dedicated to disinfection and air purification. Thanks to the coupling of photocatalysis and UV-C disinfection, the mobile robot destroys pathogens, such as Volatile Organic Compounds (VOCs), viruses, bacteria, odours, etc. This solution limits the spread of infectious diseases in indoor environments.



Technical specifications

Volume of treated air 138 m ³ per hour	Application module Air purification device dedicated to indoor environments	Navigation type Autonomous
Unloaded weight 102 kg	Interface Touchscreen	Speed max 1.80 m/s
Autonomy 8 h	Radius of gyration 350 mm	Security Horizontal and vertical laser scanners, sonars and emergency stops
Height 1,50 m	Communication Wi-Fi / Bluetooth	Certification CE

Options

- Visual presence indicator
- Acuity localization

Application

In a shopping center, a fleet of 30 XuP-Steri A work together to disinfect and purify the surrounding air. XuP-Steri A draws in polluted air to treat it by reducing fine particles, odors and airborne pollutants such as VOCs, bacteria, viruses and moulds. The XuP-Steri A fleet is totally autonomous, the robots move around in complete safety in the presence of the general public.













Thanks to this fleet, the shopping center can be disinfected 24/7 and thus optimize the volume of air treated. The shopping center can therefore welcome its customers serenely.

XuP-Meal

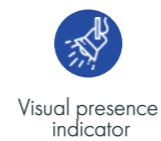
Autonomous, intelligent and collaborative, XuP-Meal is a mobile robot that transports meal trays in catering areas, such as company restaurants.



Technical specifications

 Payload 35 kg	 Application module Roller conveyor	 Navigation type Autonomous
 Unloaded weight 100 kg	 Interface Touchscreen	 Speed max 1.80 m/s
 Autonomy 12 h	 Radius of gyration 350 mm	 Sécurité Horizontal and vertical laser scanners, sonars and emergency stops
 Height 1,40 m	 Communication Wi-Fi / Bluetooth	 Certification CE

Options



Visual presence indicator



RFID reader



Camera

Application

In a company restaurant, XuP-Meal independently transports boxes of meal trays from a preparation area to the distribution areas.

A head waiter then takes over to serve the customer in person. These meal trays are intended to be delivered to company staff during their lunch break. Equipped with a conveyor roller, XuP-Meal loads and unloads the boxes, communicating with the existing equipment (conveyor, packaging station) and the building (autonomous lift pick-up, automatic door opening and traceability of goods transported).



Peri-robotic ecosystem

Meanwhile Middleware

Meanwhile middleware - Mw² is a management application, assimilated to the middleware and hosted at the client. It is developed by Meanwhile, specifically for the needs of the project. Mw² makes it possible to interface the world of robotics, perirobotics and the customer's existing equipment/software.

The Mw² application also allows to obtain the status of all the equipment of the project, including mobile robots. It processes the defects and alarms that have been reported. In addition, the management application gives access to a large number of parameters necessary for the project.

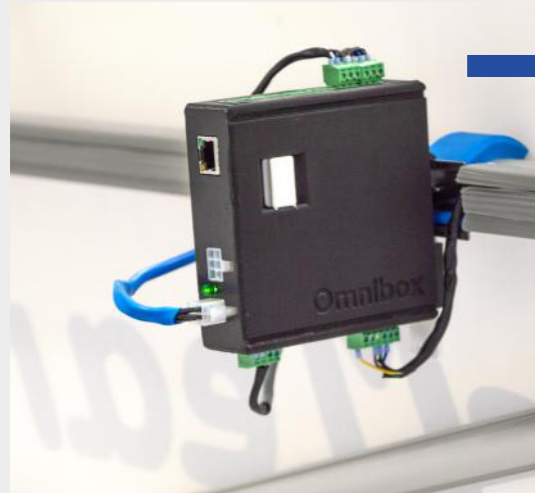
**_ Simplified management
of your application**

**_ Collaborative
interoperability**

**_ Tailored
adjustement**



OmniBox



It is a fixed device allowing simple and almost transparent interfacing between mobile robots, existing machines and other equipment in the work environment, thus simplifying the implementation of the mobile robotics solution. The development of communication gateways to existing protocols in industries, allows the OmniBox a business-oriented interfacing, dedicated to the control of the fleet of mobile robots.

The OmniBox allows, among other things, the automatic opening of doors by all our mobile robots.

Customize your application with ...

OmniReport



Data analysis is a key factor for operation and optimization, especially in Industry 4.0 environments. OmniReport is a data analytics platform that allows customers to optimize its performance. But also to view the status and statistics of their fleet of Meanwhile mobile robots.

Monitoring app



In order to facilitate the interaction between mobile robots and logisticians, Meanwhile offers supervision tablets. The 12" industrial tablets are shock resistant and designed for intensive use. They will allow you to create or modify missions manually, visualize in real time the status of the robots and the performance of the fleet.

Gestionnaire de flotte



The fleet manager is an essential element in the operation of a fleet of mobile robots. This equipment allows the centralization of data (mapping, configuration) and the efficient management of robot missions. The Fleet Manager also coordinates the movement and interaction of up to 100 mobile robots in a fleet, to ensure that each robot knows the location and path of any other mobile robot that may affect it.

Elevator manager



This equipment transforms your lift into a connected lift by allowing interfacing with the robot. The mobile robot can thus use it on several floors in complete autonomy.

Remote light pole



The light pole is connected to the robot (via a specific box) and installed in your establishment. It makes it possible to display colors according to the state of the mobile robot (arrival at destination, in error, etc.) in order to visually warn users.

Gravity conveyor



In order to ensure a solution that is as economical and efficient as possible, it is possible to interface mobile robots with gravity roller conveyors, equipped with the OmniBox.

Support and Services



We analyze your needs

Our team is there to guide you on the expression of your needs in order to determine the most suitable solution and advise you on the various appropriate technical choices.

02



We install the solution on your site

Our team is responsible for deploying the solution on your site. We start the application on your site, we map the locations and schedule the missions.

01

We train your employees

Meanwhile offers to train your teams in the use of its mobile robotic solutions and is committed to maintaining the level of training of your teams. These trainings aim to make you gain in autonomy, productivity and will allow you to use your mobile robots in an optimal way.



04



We provide support and maintenance for your solutions

It is a customizable contract with an adjustable duration in order to guarantee the control of operating costs and the maintenance of the performance of the system in place. Its subscription also allows you to benefit from on-site intervention responsiveness and preferential rates on corrective interventions and spare parts.

The maintenance contract includes :

- *Hotline, office hours, within the limit of 50 hours/year, with remote handling (if possible and necessary).*
- *A shared preventive visit per year, with replacement of wear parts.*
- *A change of the battery of each robot, for any contract renewed for 5 years without interruption.*

03

Technical specifications

XuP range



Robot	XuP-Box	XuP-Lift	XuP-Semi	XuP-Cart	XuP-Med
General					
Dimensions	L:800 x l:670 x h:1500 800mm diameter	L:700 x l:670 x h:1850 700mm diameter	L:700 x l:670 x h:1410 700mm diameter	L:880 x l:950 x h:1350 950mm diameter	L:700 x l:670 x h:1550 700mm diameter
Unloaded weight	90 kg	115 kg	135 kg	80 kg	107kg
Application module	Raising and lowering for passive fork rack	Bi-zone roller conveyor on up and down	4 axis FOUF positioning system	Trolley auto-coupling system	Secure cupboard
Payload	50 kg	35 kg	15 kg	105 kg	15kg
Size of container on board	600x400mm, 2x (300x400mm)	600x400mm, 2x (300x400mm) or inférieur	Fouf Ø300mm	800 x 835 x 1500 mm	5 trays that can accommodate 8 racks of 250x100x60 mm
Mobility					
Navigation	Autonomous				
Speed max	1.35 m/s				
Soil specification	Level surface (without water, oil or dust)				
Environnement					
Application environment	Indoor use only				
Operating temperature	5 to 40°C				
Classification	IP20				
Charging					
Charging station	L :384 x l :356 x h :315				
Power					
Battery	22 - 30 VDC - 72AH - Lithium-ion				
Autonomy	± 10 hours		± 10 hours		± 12 hours
Charging Time	± 4 hours				
Security					
Safety laser scanner	Located at the front, 200mm from the ground				
Emergency stop	Button (x2)				
Rear sensors	Sonar				
Foot detection laser scanner	Located at the front				
Vertical laser scanner	Yes (x2)				
Warning light	Disques lumineux	Light discs + Upper LED strip			
Communication					
Bluetooth	Bluetooth 2.+ERD				
WI-FI	IEE 802.11 a/b/g				
Interface					
H.M.I	Screen LCD TFT de 7"				
Manual movement	Push buttons				

Evy range



	XuP-Med L	XuP-Host	XuP-Steri A	XuP-Meal	Evy-Box
General					
Dimensions	L:700 x l:670 x h:1000 - 700mm diameter		L:700 x l:670 x h:1800 - 700mm diameter	L:700 x l:670 x h:1400 - 700mm diameter	L:1000 x l:720 x h:1400 - 1000mm diameter
Unloaded weight	80kg				250 kg
Tray that can accommodate tube racks		Euronorm tray + tray	Air cleaning device	Roller conveyor	Raising and lowering for passive fork rack
270 standard pipes		15 kg		35 kg	175 kg
-		Euronorm box 600x400 mm			800x600 mm or 2x600x400 mm
Mobility					
Navigation	Autonomous				
Speed max	1.80 m/s				1.20 m/s
Soil specification	Level surface (without water, oil or dust)				Flat ground only
Environnement					
Application environment	Indoor use only				
Operating temperature	5 to 40°C				
Classification	IP20			IP20 + IP65	IP20
Charging					
Charging station	L :384 x l :356 x h :315				
Power					
Battery	22 - 30 VD -72AH - Lithium-ion				
Autonomy	± 12 hours		± 8 hours	± 12 hours	± 10 hours
Charging Time	± 4 hours				
Security					
Safety laser scanner	Located at the front, 200 mm from the ground				
Emergency stop	Button (x1)		Button (x2)		
Rear sensors	Sonar				Time-of-flight (TOF) sensor
Foot detection laser scanner	Located at the front				
Vertical laser scanner	Yes (x2)				
Warning light	Luminous discs				
Communication					
Bluetooth	Bluetooth 2.+ERD				
WI-FI	IEE 802.11 a/b/g				
Interface					
H.M.I	Screen LCD TFT de 7"				
Manual movement	Push buttons				

Options

	Evy-Box	XuP-Lift	XuP-Med	XuP-Med L	XuP-Host	XuP Steri A	XuP-Med	XuP-Box	XuP-Semi	XuP-Cart
-Acuity- Acuity navigation allows the mobile robot to locate itself by light triangulation. By using the lights as landmarks on the ceiling, it generates an additional map allowing it to be located whatever the configuration on the ground.	○	○	○	—	—	○	○	○	○	—
-RFID reader- The addition of an RFID reading head and the deployment of associated software give the mobile robot a dimension of product traceability. Once the robot is equipped, it is then possible to follow the evolution in real time of each of the chip products and thus to extract precise flow data on the performance and evolution of the workspace of the mobile robots.	○	○	○	○	○	—	○	○	○	—
-Visual presence warning- Equipped with red spotlights, the mobile robot projects a light spot 4 meters in front of it. This allows users to easily understand the arrival of the mobile robot in an industrial environment, on the same principle as the projectors used by fork trucks.	○	○	○	○	○	○	○	○	○	—
-Camera- The camera is small, discreet and embedded in the robot's shell. It allows you to visualize the environment around the robot and possibly help to unblock blocking situations. This camera is visible in real time from a web browser. In accordance with CNIL rules, no photo/video recording will be made with this camera.	—	—	○	—	—	—	○	—	—	—
-Pick-to-light- Bright visual indicator allowing the user to retrieve his package without making a mistake.	—	—	○	—	—	—	○	—	—	—
-Bi-zone roller conveyor- The system allows two 300x400 mm boxes to be loaded independently.	—	○ Natif	—	—	—	—	—	—	—	—
-Automatic box centering device- The automatic box centering system allows the mobile robot to handle boxes of various sizes, while ensuring that they are unloaded efficiently.	—	○	—	—	—	—	—	—	—	—
-Secured box- This module allows you to transport your equipment in complete safety thanks to the securing of the transport box with a lock.	—	—	○ Natif	—	○	—	—	—	—	—
-Room sensors- The ambient sensors integrated into the robots make it possible to analyze environmental data such as: temperature / humidity / presence / luminosity.	—	—	—	—	○	—	—	—	—	—
-Barcode reader- Reader for reading a bar code. Processing and archiving of the data read.	—	—	○	—	—	—	—	—	—	—



Find us

Meanwhile SAS

Bâtiment CEI 3 INSA Valor
62 boulevard Niels Bohr, 69100 Villeurbanne - FR

Contact

contact@meanwhile-france.com
+33 4 81 06 18 25
www.meanwhile-france.com/en/

Innovation for humans.

Meanwhile **WHILE** 