



XuP-Stacker

Automatic pick-up and drop-off of multiple container types on all kinds of supports.

*Mean*WHILE

Technical specifications :

General	
Max speed	1.20m/s (4,32km/h)
Dimension (LxWxh)	690 x 735 x 1850 mm (815mm diameter)
Mechanical weight	105 kg

Application	
Technology	Pick-up and drop-off of multiple container types on any surface
Max pick-up/drop-off height	1555 mm
Min pick-up/drop-off height	450 mm
System lifting and lowering speed	9m/minute
Type of containers	Box, crate, carton, tray, sample rack...
Max weight per container	5 to 15 kg
Payload	45 kg
Max size of the loaded container	400 x 300 mm
Maximum number of containers	Up to 12 units

Mobility	
Navigation	Autonomous trajectory generation and tracking through localization using a safety laser scanner based on environmental mapping
Movement	Obstacle avoidance and bypass through trajectory calculation
Robot map creation	Scanned by moving the robot through its environment
Max rotation speed	180°/s



Safety	
Safety laser scanner	Located at the front, Class 1 PLd Safety by ISO-13849 Max range : 15 m Field of view : 240°
Low front laser	Located at the front, Class 1 Max range : 4m Field of view : 126°
Side lasers	On both sides of the mobile robot, Class 1 Max range : 4m Field of view : 270°
Emergency Stop	Two buttons placed on each side of the robot
Rear Sonar	2 located at the rear, max range: 2 m
Warning lights	Upper LED strip
Speakers	3.5", 80W max

Human-Machine Interface	
Touchscreen	7" TFT LCD screen, 800x480 pixels
Manual Mode	Two push buttons to move the robot manually

Environnement	
Operating temperature	5-40° C
Ambient humidity	5 - 95%
Application environment	Indoor use only, limited dust, no corrosive gases
IP Class	IP20
ESD	No
ISO Cleanroom	N/A

Floor specification	
Floor characteristics	Linoleum, epoxy or concrete (no water, no oil, no dust)
Floor flatness	FF25
Traversable step	Max : 10 mm
Traversable gap	Max : 10 mm
Climb grade	Max : 5%

Battery	
Voltage	22-30 VDC LiFePO4
Capacity	72 Ah
Run time	± 10 hours
Recharge time	± 4 hours
Battery life time	2 000 recharge cycles
Charging method	Automatic, manual



Communication	
WI-FI	IEEE 802.11 a/b/g/ac/n

Regulations	
Declaration of conformity	CE marking – ISO 3691-4

Options	
	Custom gripper
	Custom shelves
	Wireless charger

