



# XuP-Box

Transport of containers with placement and removal on passive fork racks.

**MeanWHILE**

Technical specifications :

General	
Max speed	1.35m/s (4,85km/h)
Dimension (LxWxh)	720 x 637 x 1631 mm (720mm diameter)
Mechanical weight	90 kg
Application	
Technology	Lift table equipped with an automatic box centering device
Max pick-up/drop-off height	900mm
Min pick-up/drop-off height	700mm
Up and down system speed	1,5m/minute
Type of containers	Containers, cartons
Max weight per container	N/A
Payload utile	50 kg
Max size of the loaded container	600 x 400 mm / 2 x (300 x 400 mm)
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 : 15m 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	Time-of-Flight (TOF) sensors
Front bumper	One located at the front, two pairs of sensors
Warning lights	Light discs on each side + 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	
	Visual presence indicator (Spot)
	Wireless charger

