XuP-Cart

Cart transport

Meanwhile

Technical specifications :

General	
Max speed	1.35m/s (4,85km/h)
Dimension (LxWxh)	880 x 950 x 1350 mm (950mm diameter)
Mechanical weight	80 kg

Application	
Technology	Automatic cart coupling system
Max pick-up/drop-off height	N/A
Min pick-up/drop-off height	N/A
System lifting and lowering speed	N/A
Maximum weight of individual containers	N/A
Payload	105 kg
Max size of the loaded container	800mm x 835mm x 1500 mm
Docking area	1300 x 2500 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 : 15 m Field of view : 240°
Low front laset	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 voew : 270°
Emergency Stop	Two buttons placed on each side of the robot
Rear Sonar	2 located at the rear, max range: 2 m
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	
	Custom cart
	Wireless charger