

XuP-Cart



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

105 kg

Payload

500 mm

Radius of gyration

1.35 m/s

Max. speed



Trolley transport

XuP-Cart moves trolleys independently in its working environment.



Gripping system

It enables the brakes of the trolley to be automatically and disengage the brakes of the carriage to be transported. Once the coupling is the carriage is fully connected.



Safe

Designed according to a risk analysis following the Machinery Directive 2006/42/EC and the standard ISO 3691-4.

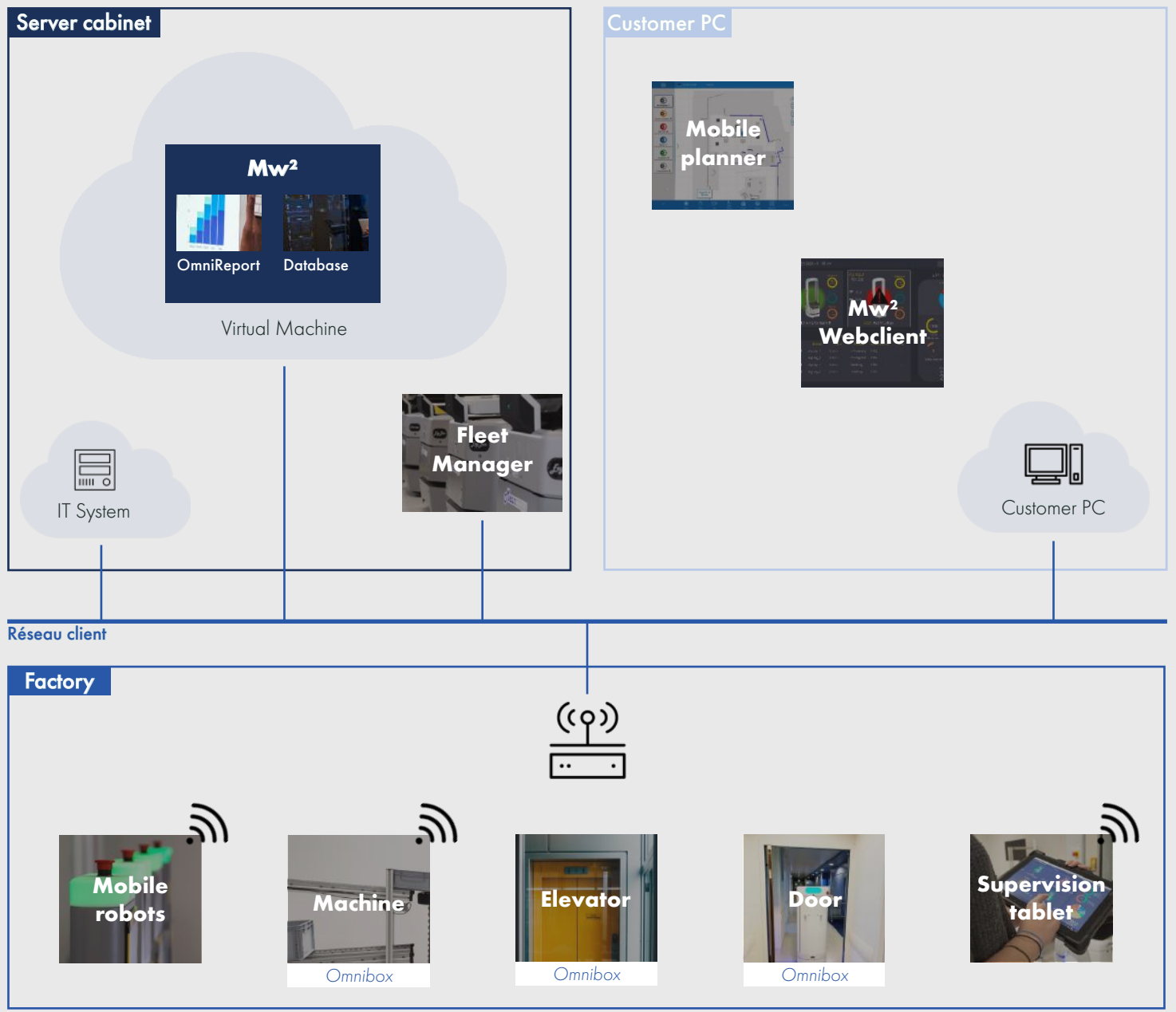


A turnkey solution

Automatic Delivery



Solution ecosystem



Technical specifications



General

Max. speed

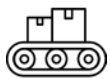
1.35m/s (4,85km/h)

Dimension (LxWxh)

880 x 950 x 1350 mm (950 mm diameter)

Mechanical weight

80 kg



Application

Technology

Automatic carriage coupling system

Mandatory docking area

1300 x 2500 mm

Payload

105 kg

Size of the embedded containing

800mm x 835mm x 15000 mm



Mobility

Navigation

Autonomous routing by localizing with safety scanning laser based on environment mapping.

Environmental map making method

Scan by walking the mobile robot through the environment.

Move

Avoidance and bypassing of obstacles by calculating a new trajectory.



Human-Machine interface

Touchscreen

7" TFT LCD screen, 800x480 pixels

Manual Mode

Two push buttons to move the robot manually if necessary



Environnement

Operating temperature range

5 - 40° C

IP Class

IP20

Application environment

Indoor use only, limited dust and oil suspension

Climb grade

Max : 8%

Floor requirement

Linoleum, epoxy or concrete (no water, no oil, no dust)



Technical specifications



Safety

Safety scanning laser

At front, Class 1
PLd safety per ISO 13841-1
15m maximum range
240° field of view

Low front laser

1 at front, Class 1
4m maximum range
126° field of view

Side lasers

1 on each side of the platform, Class 1
4m maximum range
270° field of view

Emergency Stop

2 on each side of the robot

Rear Sonar

2 at rear, 2m range

Front bumper

1 at front of platform, 2 pairs of sensors

Warning lights

Light discs on each side
Upper LED strips

Speaker and buzzer

3.5", 80W max



Battery

Run time

± 10 hours

Recharge time

± 4 hours

Voltage

22-30 VDC LiFePO4

Capacity

72 Ah nominal capacity

Battery life time

2 000 recharge cycles

Charging method

Automatic, manual



Communication

WI-FI

IEEE 802.11 a/b/g

Bluetooth

Bluetooth 2.+ERD



Declaration

EC Declaration of conformity

CE Marking

MeanWHOLE